Energy Levels and Observed Spectral Lines of Xenon, Xe I through Xe LIV

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(Received 14 May 2003; revised manuscript received 13 November 2003; accepted 15 December 2003; published online 25 August 2004)

The energy levels and observed spectral lines of the xenon atom, in all stages of ionization for which experimental data are available, have been compiled. Sufficient data were found to generate level and line tables for Xe I–Xe XI, Xe XIX, Xe XXV–Xe XXIX, Xe XLIII–Xe XLV, and Xe LI–Xe LIV. For Xe LIII and Xe LIV theoretical values are compiled for the energy levels. In 15 of the other stages a few lines are reported. Experimental *g* factors are included for Xe I, Xe II, and Xe III. A value, either experimental, semiempirical, or theoretical, is included for the ionization energy of each ion.
[DOI: 10.1063/1.1649348]

Key words: compilation; critically evaluated data; energy levels; observed spectral lines; spectra; Xe; xenon; xenon ions.

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1. Introduction

In 1958 Moore [58MOO] published a compilation of the energy levels of xenon containing detailed analyses of Xe I–Xe III and a very partial analysis of Xe IV. In 1968 Striganov and Sventitskii [68STR] published a compilation of xenon lines containing a long list of observed lines for Xe I–Xe III, a limited calculated list for Xe IV, and a few lines for Xe V–Xe VIII. Since these compilations were completed, much work on Xe has been published. This work includes results obtained with new techniques such as laser spectroscopy, beam foil spectroscopy, electron beam ion trap (EBIT), laser excited plasmas, laser implosion, and fusion devices such as tokamaks. As a result we now have energy levels for 24 stages of ionization of Xe and at least one line for 39 stages.

This compilation takes into account published work through December 2002. There are occasional exceptions in which later work is considered, particularly for the ion Xe XI.

Generally, only experimentally derived energy levels are used; these include semiempirical results obtained by interpolation and extrapolation along isoelectronic sequences. An exception is made for Xe LIII and Xe LIV where good theoretical values exist. The use of calculated values is indicated by enclosing the energy value in square brackets for these ions and for a very few levels in other ionization stages.

We tabulate only those lines that have defined levels but include some additional lines in the text for highly ionized stages. For tabulated lines, the wavelengths are compared to the energy level differences and must be consistent to be included. For many of the stages, decisions are made about which of several possible classifications to include by calculating the respective transition probabilities with the Cowan code [81COW]. As a result of this process, in a few cases the line classifications may differ from those given in the stated references.

Occasionally two groups may differ in their published analyses of the spectra of a particular stage of ionization and in the identification of lines belonging to that stage. In such cases we select the analysis we believe to be better. However, the choice is not always clear.

Many laser spectroscopy papers provide data about Rydberg series with results up to very high values of the principal quantum number n. In this compilation we limit the tabulated levels (and thus also the corresponding lines) to include only n less than or equal to 20.

For the first ionization energy we try to provide the best available values obtained experimentally. We do not average experimental values by different authors. Where experimental values are not available, we prefer to use semiempirical results which adjust calculations along an isoelectronic sequence to fit available information about some of the members. For one- and two-electron ions there are very good theoretical values. Where no information of these types is available, we use the calculations of Carlson *et al.* [70CAR] which are based on a simple spherical shell solution for neutral atoms. Their results seem to be within about 7% of values obtained by experimental or semiempirical methods for xenon. We note that another calculation was carried out by Magomedov and Omarova [90MAG] using the method of the quasiclassical self-consistent field. The available xenon experimental and semiempirical values tend to fall between the two calculations except for the highest ionization stages.

All energy levels are given in units of cm^{-1} and all wavelengths in units of Å (0.1 nm). Ionization energies are provided in both cm^{-1} and eV. We use the conversion factor $8\,065.544\,77 \pm 0.000\,32\ cm^{-1}$/eV as determined by Mohr and Taylor [99MOH].

Although it is often difficult to determine, uncertainties in the referenced publication of energy levels and lines are likely 1σ values. In many cases only the number of decimal places indicates the uncertainty in the quoted values. We generally use a ''rule of 20'' whereby an uncertainty of greater than 20 in the least significant digit serves as the criterion for dropping that digit.

The text for each ion does not attempt to provide a complete review of all work on that stage of ionization. Rather, it intends to credit the major contributions, especially those from which values are included in the line and level tables.

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2. Acknowledgments

I wish to thank J. Reader, C. J. Sansonetti, and W. C. Martin for many helpful discussions and advice on the selection of data to include in this compilation. I thank J. Reader for providing prepublication access to the Xe XI data. This work was supported in part by the Office of Fusion Energy Sciences of the U.S. Department of Energy and by the National Aeronautics and Space Administration.

3. Explanation of Tables of Compiled Levels and Lines

In the Energy Level Tables the first column provides the energy level in units of cm^{-1}. The values have been rounded using the ''rule of 20.'' The absence of a decimal point in a whole number is used to indicate that the last digit is not significant. The second column provides the parity of the

TABLE 1. Sources of Xe I levels

Source	Number of levels	Method	Adjustment[a] (cm^{-1})	Comment
58MOO	86	Compilation of published and unpublished work to Dec. 1957	$\Lambda-0.508$	To match ground to excited state separation as determined from 01BRA (adjusted)
58THE	20	Classical spectroscopy	$\Lambda-0.508$	To match ground to excited state separation as determined from 01BRA (adjusted)
67HUM	8	Classical spectroscopy	$\Lambda-0.508$	To match ground to excited state separation as determined from 01BRA (adjusted)
70HUM	101	Interferometric spectroscopy on ^{136}Xe	$\Lambda-X$	X given in Table 2. Adjusted to natural isotope mix using several reported isotope measurements and ground to excited state separation as determined from 01BRA (adjusted)
72COD	50	Absorption spectroscopy using synchrotron radiation	None	
81GRA	18	Optogalvanic spectroscopy	$\Lambda-0.508$	To match ground to excited state separation as determined from 01BRA (adjusted)
82LAB	74	Laser excitation with optogalvanic spectroscopy	$\Lambda-0.501$	To match the value we use for the $6p[5/2]_3$ level
85YOS	28	Absorption spectroscopy of discharge source	None	
89HUI	37	Laser spectroscopy	None	
98AHM	16	Optogalvanic spectroscopy	None	Uses same value of reference level as we do to the precision of the results
01BRA	5	Isotope resolved laser spectroscopy	To natural isotope mix	Isotope-specific results adjusted to natural isotope mix by using average weighted by abundance of isotopes in the natural mix

[a]Λ is the value of the level as published. X is given in Table 2.

energy level; ''0'' signifies even parity and ''1'' signifies odd parity. The next three columns specify the configuration, term, and J value of the level. In the cases of Xe I–Xe III there is an additional column next which provides the g factor of the level (when known). Finally in the last column a reference is given to the source of the compiled level.

In the Line Tables wavelengths between 2 000 and 20 000 Å are in air. All others are vacuum wavelengths. The first column is the observed wavelength in angstroms (Å). The second column is the vacuum wave number corresponding to the observed wavelength. The wave numbers are provided in units of cm^{-1} for ionization stages Xe I–Xe VI and in units of 10^3 cm^{-1} for the higher ionization stages. The absence of a decimal point indicates that the last zero is not a significant digit. The conversion between air wavelengths and vacuum wavelengths and wave numbers is made using the three-term formula given in Eq. (3) of Peck and Reeder [72PEC]. The wave number values are rounded to the appropriate number of significant digits using the ''rule of 20.'' The third column is the relative intensity assigned to the line. Also included here are codes which are defined for each ion. The next six columns specify the classification of the transition responsible for the line by providing the configuration, term, and J value first for the lower level and then for the upper level. The next to last column is an estimate of the uncertainty in the wavelength of the observed line. The last column identifies the source of the observed line.

Reference

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4. Tables of Energy Levels and Observed Lines

4.1. Xe I

$Z=54$

Ground state

$1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10} 5s^2 5p^6\ {}^1S_0$

Ionization energy $97\,833.787 \pm 0.012$ cm^{-1} ($12.129\,842 \pm 0.000\,002$ eV)

The energy levels of Xe I have been compiled from 11 different sources [58MOO], [58THE], [67HUM], [70HUM], [72COD], [81GRA], [82LAB], [85YOS], [89HUI], [98AHM], [01BRA] which are summarized in Table 1. Where necessary, the published energy levels (denoted by Λ in Table 1) have been adjusted to put all sources on a common basis. The adjustments used are specified in Tables 1 and 2. The largest part of the adjustments has been to obtain a common value for the large separation between the ground state and the excited levels. The value we used was obtained

TABLE 2. Parameter X for adjusting 70HUM levels

Level	X (cm^{-1})
$4f$, $5f-9f$	0.496
$5d$	0.497
$6s$	0.500
$6p$	0.495
$7p$	0.496
$8p$	0.497
$10f$	0.497
all others	0.498

TABLE 3. Sources of Xe I lines

Source	Number of classifications	Light source	Wavelength range (Å)	Uncertainty (Å)
30GRE	2	Geissler tube	5116–5523	0.03 (estimate)
33HUM	410	Geissler tube	3340–10515	0.01 for $\lambda \leqslant 9000$ Å 0.02 for $\lambda > 9000$ Å
34MEG	132	Geissler tube (intensities taken from 33HUM)	3948–9923	0.0005 for 4 d.p. lines 0.002 for 3 d.p. lines
35BEU	4	Absorption of carbon arc source	962–996	0.15
35MEG	25	Geissler tube	10 550–12 623	0.03 for 2 d.p. lines 0.1 for 1 d.p. lines
49SIT	5	Flash tube	12 204–19 467	0.5
52HUM	11	Geissler tube	12 451–16 052	0.1
55THE	3	Xe discharges of varying pressures	5963–8559	0.2
58THE	39	Strong Xe discharge at relatively high pressures	3738–10 324	0.2
60HUM	4	Electrodeless discharge tubes	14 355–16 665	Only Ritz wavelengths
61HEP	4	Cooled Geissler tube	23 198–26 518	0.8
63HUM	1	Electrodeless discharge tube	39 210	2.
64AGO	2	Wide band optical maser	32 752	3.
64FAU	3	Maser	34 340–185 140	10.
64PET	1	Electrodeless discharge tube	1470	0.003
67HUM	21	Electrodeless discharge tubes	38 679–40 769	1.
72COD	50	Absorption of synchrotron radiation	430–592	0.02–0.10
72MOR	184	Electrodeless discharge tube	36 518–54 447	1.–4.
73HUM	103	Electrodeless discharge tube	12 409–36 242	Only Ritz wavelengths
85YOS	69	Absorption of He discharge for $\lambda < 1070$ Å Absorption of Ar discharge for $\lambda > 1070$ Å	926–1296	0.002 for 3 d.p. lines 0.01 for 2 d.p. lines
98AHM	34	Optogalvanic spectroscopy	6383–6753	0.13
00MIS	24	Electrodeless discharge tube	10 528–21 476	0.003–0.014
01BRA	3	Isotope-resolved laser spectroscopy from ground state	1044–1061	0.000 03

from the isotope-specific results of Brandi *et al.* [01BRA] for the $5p^6-5p^5nl$ energy difference by using an average of values for each isotope weighted according to its fraction in the natural isotope mix. This same method of averaging the isotope-specific values was used to obtain our quoted ionization energy from the isotope specific results of Brandi *et al.* [01BRA].

The first major compilation of Xe I levels, by Moore [58MOO], was largely based on unpublished work of Edlén. Several other sources [58THE], [67HUM], [70HUM], [81GRA] use this work's value for the ground–excited state separation and all are adjusted to the value based on Brandi *et al.* [01BRA]. Several other sources require no adjustment since they measure directly from the ground state [72COD], [85YOS], [89HUI] or, to the precision of their quoted results, use a reference level [98AHM] in agreement with the value used here. The most precise measurement of many excited levels was in the work of Humphreys and Paul [70HUM]. However, their work was for the single isotope ^{136}Xe. In order to be able to use these results, their values were corrected to the natural isotope mix as specified in Tables 1 and 2 by using isotope shift data [89PLI], [74JAC], [75JAC] and a weighted average over the isotopes. This results in a decrease in precision from the four decimal places quoted in Humphreys and Paul [70HUM]. The uncertainty is estimated to be 0.0035 cm^{-1} from the ground state and 0.001 cm^{-1} between excited levels.

Note that in the level table the three energy levels in square brackets are predicted values furnished to Moore [58MOO] by Edlén. The energy of autoionizing levels can be specified in two different ways. One is to specify the resonance energy of the absorption profile. The other is to specify the energy at which the peak of the absorption profile occurs. We chose the latter in order to facilitate the use of these tables with observations of spectra. There is work reported using the former, e.g., [86WAN] and [00KOR].

The observed spectral lines of Xe I have been compiled from 23 distinct sources [30GRE], [33HUM], [34MEG], [35BEU], [35MEG], [49SIT], [52HUM], [55THE], [58THE], [60HUM], [61HEP], [63HUM], [64AGO], [64FAU], [64PET], [67HUM], [72COD], [72MOR], [73HUM], [85YOS], [98AHM], [00MIS], [01BRA] with seven additional sources [32RAS], [36BOY], [55PLY], [56HEP], [61HUM], [67AND], [74TAG] totally superseded by the others. The distinct sources are summarized in Table 3. The priority in our choice of lines which appear in more than one reference is specified as follows by spectral region.

Far ultraviolet (400–1500 Å): [01BRA], [85YOS], [64PET], [36BOY], [72COD], and finally [35BEU].

Near ultraviolet and visible (3000–8000 Å): [34MEG], [33HUM], [55THE] for lines between 5200 and 5710 Å, [30GRE], [32RAS], [58THE], [55THE] outside range specified above, [74TAG], and finally [98AHM].

Near infrared (8000–20 000 Å): [34MEG], [00MIS], [35MEG], [33HUM], [52HUM], [55PLY], [30GRE], [32RAS], [58THE], [55THE], [49SIT], [67AND], [73HUM], [61HUM], and finally [60HUM].

Far infrared (greater than 20 000 Å): [49SIT], [61HEP],

[67HUM], [56HEP], [63HUM], [67AND], [72MOR], [64AGO], [64FAU], [73HUM], [61HUM], and finally [60HUM].

As Table 3 indicates, two sources [60HUM], [73HUM] do not provide observed wavelengths but instead give Ritz wavelengths, which are the wavelengths calculated from known energy levels. Since we do not know the actual wavelengths observed, the Ritz wavelengths are quoted to only one decimal place. The corresponding vacuum wave numbers are also given with only one decimal place. In addition for [73HUM], the values quoted were for the isotope ^{136}Xe. We recalculated these Ritz values to base them on our energy levels for the natural isotope xenon mix and also quoted these to one decimal place.

There are some cases in which the authors' choice of which transition to assign the observed line is questionable. For example, in [73HUM] (using vacuum wavelengths) the 33 536.1 Å line was classified as $5d'[5/2]_2-9p[5/2]_3$. But calculation using the Cowan codes [81COW] indicates that the $6p'[1/2]_1-7d[1/2]_0$ transition should be about 20 times stronger. Its wavelength would be 33 543.3 Å. This may be the line actually observed but we report the classification of [73HUM] here.

The classification of the three electric quadrupole lines is due to Edlén [43EDL]. A few additional lines in the wavelength region 1027–1089 Å have been identified by Abbink [28ABB] as Xe I lines. We have been unable to classify these lines and so have not included them. Where possible we have corrected typographical errors in the references. For example, from the stated energy levels in [85YOS] it was clear that the line reported at 1030.453 Å was really at 1030.435 Å.

The wavelengths of lines between 5200 and 5710 Å given in the unpublished report [55THE] suggested higher precision than those provided by [33HUM]. However, they did not agree as well as [33HUM] with the values predicted by the energy levels. Therefore the results of [33HUM] were given priority over [55THE] resulting in no [55THE] lines in this range being in the Xe I line table.

The large uncertainties in the far infrared wavelengths of [72MOR] (often 4 Å) made classification difficult and multiple classification frequent. Lines and levels included in the tables were limited to $n \leqslant 20$. A few additional lines were reported by [74TAG] but were not included because their ionization stage could not be determined. We also note that some far infrared stimulated emission lines reported by [65LIB] were also not included.

All candidate lines were passed through a program to determine if they correspond to a transition between the known Xe I levels. Only classifiable lines are included in our compilation.

Transition probability calculations using the Cowan codes [81COW] with empirically adjusted configuration average energies were used to help resolve choices between multiple possible classifications of lines. Convergence was not obtained for the $19s$, $20s$, $20d$, and $20f$ levels and so we could not use the codes for guidance in transitions involving them. Intensities have been taken from the stated sources.

The intensity codes given in the Xe I line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
a	observed in absorption
h	hazy
hf	line has hyperfine structure
l	unsymmetrical-shaded to longer wavelength
w	wide
E2	electric quadrupole line
f	forbidden line
:	Ritz line from levels in natural isotope mix of xenon. Given to only one decimal place since the observed wavelength was not reported.
—	somewhat less intensity than the value given
*	multiply classified line (two or more classifications of this line share the same intensity)

The g_J values included in the Xe I level table are compiled from eight sources [41GRE], [71CHE], [72PRI], [79HUE], [79HUS$_a$], [79HUS$_b$], [83ABU], [83BIN]. Uncertainties have been included in parentheses for those g_j values for which they were specified.

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Energy levels of Xe I

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
0.000	0	$5p^6$	^1S	0		01BRA
67 067.547	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	1.50095(11)	70HUM
68 045.156	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	1.2055(2)	70HUM
76 196.767	1	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0		01BRA
77 185.041	1	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	1.321	70HUM
77 269.145	0	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	1.852	70HUM

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
78 119.798	0	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	1.11103(33)	70HUM
78 403.061	0	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	1.336	70HUM
78 956.031	0	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	1.02348(30)	70HUM
79 212.465	0	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	1.3836(7)	70HUM
80 118.962	0	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0		70HUM
88 379.126	0	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.7925(2)	70HUM
89 162.356	0	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	1.190(1)	70HUM
89 278.706	0	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	1.551(1)	70HUM
89 860.015	0	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0		70HUM
79 771.267	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0		70HUM
79 986.618	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	1.395	70HUM
80 196.629	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	1.2506(3)	70HUM
80 970.438	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	1.0749(4)	70HUM
80 322.746	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	1.3750(3)	70HUM
83 889.971	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1		70HUM
81 925.514	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2		70HUM
82 430.204	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3		70HUM
91 152.670	1	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2		70HUM
91 746.564	1	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	1.126	70HUM
91 447.474	1	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	1.274	70HUM
93 618.24	1	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1		58MOO
85 188.777	1	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2		70HUM
85 440.017	1	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1		70HUM
95 720.95	1	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0		58MOO
95 800.584	1	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	1.308	01BRA
87 927.131	0	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	1.7272(2)	70HUM
88 351.681	0	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	1.1276(5)	70HUM
88 469.213	0	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	1.330(2)	70HUM
88 744.559	0	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.9039(2)	70HUM
88 686.500	0	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	1.3520(2)	70HUM
88 842.256	0	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0		70HUM
98 855.0	0	$5p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	1		81GRA
99 052.8	0	$5p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1		81GRA
99 068.4	0	$5p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	2		81GRA
88 491.020	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0		70HUM
88 549.775	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1		70HUM
88 708.466	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2		70HUM
90 032.155	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1		70HUM
88 911.692	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4		70HUM
89 024.890	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3		70HUM
89 243.258	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2		70HUM
89 534.568	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3		70HUM
100 418.	1	$5p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1		58MOO
90 804.538	1	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	1.465	70HUM
90 932.432	1	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	1.182	70HUM
101 426.	1	$5p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1		58MOO
90 839.777	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.4997(4)	70HUM
90 849.440	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	1.11	70HUM
90 860.655	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5		70HUM
90 861.506	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4		70HUM
90 907.090	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	1.18	70HUM
90 910.052	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.86	70HUM
90 944.050	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3		70HUM
90 944.133	0	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4		70HUM
101 424.8	0	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3		58THE
101 424.8	0	$5p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3		58THE
101 424.8	0	$5p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4		58THE
101 429.3	0	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2		58THE

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
92 153.279	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	1.801	70HUM
92 221.362	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	1.103	70HUM
92 264.950	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	1.329(2)	70HUM
92 333.066	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	1.036	70HUM
92 370.923	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	1.383(2)	70HUM
92 555.135	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0		70HUM
92 259.931	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0		70HUM
92 128.287	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	1.273	70HUM
92 444.927	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4	1.217	70HUM
92 646.125	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	1.026	70HUM
92 678.516	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	1.073	70HUM
92 733.597	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	1.263	70HUM
92 721.530	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	1.196	70HUM
92 714.038	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.819	70HUM
103 419.	1	$5p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1		58MOO
93 362.671	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.4997(4)	70HUM
93 366.245	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	1.10	70HUM
93 377.475	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5		70HUM
93 378.199	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4		70HUM
93 401.466	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	1.17	70HUM
93 403.966	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.87	70HUM
93 420.823	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3		70HUM
93 420.901	0	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4		70HUM
103 928.2	0	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3		58THE
103 928.2	0	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3		58THE
103 928.2	0	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4		58THE
103 931.4	0	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2		58THE
93 398.253	1	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	1.496	70HUM
93 422.108	1	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	1.154	70HUM
103 954.	1	$5p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1		58MOO
93 421.22	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2		67HUM
93 421.53	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3		67HUM
93 427.38	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	5		67HUM
93 427.38	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	6		67HUM
93 439.76	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3		67HUM
93 439.76	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4		67HUM
93 446.13	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	4		67HUM
93 446.13	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	5		67HUM
94 066.95	0	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	1		58MOO
94 110.15	0	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2		58MOO
94 134.53	0	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	1.307	58MOO
94 168.86	0	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1		58MOO
94 190.24	0	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	1.386	58MOO
94 285.50	0	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0		58MOO
94 124.342	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0		70HUM
94 228.004	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	1.180	01BRA
94 226.320	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	1.236	70HUM
94 290.225	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	1.076	70HUM
94 285.651	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	1.303	70HUM
94 685.467	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.914	01BRA
94 339.433	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.987	70HUM
94 369.995	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	1.246	70HUM
105 013.	1	$5p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1		85YOS
94 734.882	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.50	70HUM
94 737.121	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	1.09	70HUM
94 744.198	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	5		70HUM
94 744.718	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4		70HUM

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
94 758.116	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	1.17	70HUM
94 759.935	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.87	70HUM
94 769.465	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3		70HUM
94 769.524	0	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4		70HUM
105 288.2	0	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2		58THE
105 288.2	0	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3		58THE
105 288.2	0	$5p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3		58THE
105 288.2	0	$5p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	4		58THE
94 759.927	1	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	1.512	70HUM
94 787.084	1	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	1.164	70HUM
105 303.7	1	$5p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1		85YOS
95 154.37	0	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1		58MOO
95 181.66	0	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2		58MOO
95 196.53	0	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3		58MOO
95 216.46	0	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1		58MOO
95 229.59	0	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2		58MOO
95 286.06	0	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	0		58MOO
95 179.580	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	0		70HUM
95 228.399	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	1.217	70HUM
95 249.953	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	4	1.237	70HUM
95 283.008	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3	1.078	70HUM
95 274.415	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	1.298	70HUM
95 498.48	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.899	58MOO
95 313.401	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.980	70HUM
95 334.723	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	1.225	70HUM
105 941.	1	$5p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1		85YOS
95 561.074	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1		58MOO
95 562.546	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2		70HUM
95 567.14	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	5		58MOO
95 567.48	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4		58MOO
95 575.960	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3		70HUM
95 577.20	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2		58MOO
95 583.08	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3		58MOO
95 583.16	0	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4		58MOO
106 107.8	0	$5p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	2		58THE
106 107.8	0	$5p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	3		58THE
106 107.8	0	$5p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	3		58THE
106 107.8	0	$5p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	4		58THE
95 578.961	1	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2		58MOO
95 590.97	1	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	1.188	58MOO
106 120.8	1	$5p^5(^2P^\circ_{1/2})11s$	$^2[1/2]^\circ$	1		85YOS
[95 830.8]	0	$5p^5(^2P^\circ_{3/2})11p$	$^2[1/2]$	1		58MOO
[95 848.6]	0	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	2		58MOO
95 858.18	0	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	3		58MOO
95 870.69	0	$5p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	1		58MOO
95 879.40	0	$5p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	2		58MOO
95 915.53	0	$5p^5(^2P^\circ_{3/2})11p$	$^2[1/2]$	0		58MOO
95 892.194	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	4		58MOO
95 912.003	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3	1.081	70HUM
95 896.25	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	0		58MOO
95 912.880	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1		58MOO
95 904.600	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2		58MOO
96 045.77	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1		58MOO
95 931.80	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2		58MOO
95 946.582	1	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3		70HUM
106 528.	1	$5p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	1		85YOS

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
96 096.25	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1		58MOO
96 097.31	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2		58MOO
96 100.60	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	5		58MOO
96 100.75	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	4		58MOO
96 106.31	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	3		58MOO
96 107.36	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	2		58MOO
96 111.17	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	3		58MOO
96 111.24	0	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	4		58MOO
106 639.1	0	$5p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	2		58THE
106 639.1	0	$5p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	3		58THE
106 639.1	0	$5p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	3		58THE
106 639.1	0	$5p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	4		58THE
96 109.22	1	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2		58MOO
96 122.77	1	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1		58MOO
[96 279.6]	0	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	1		58MOO
96 292.0	0	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	2		89HUI
96 298.95	0	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	3		58MOO
96 306.86	0	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	1		58MOO
96 312.89	0	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	2		58MOO
96 337.82	0	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	0		58MOO
96 304.62	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	0		58MOO
96 315.16	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1		58MOO
96 321.55	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	4		58MOO
96 334.479	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	3	1.082	58MOO
96 328.62	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2		58MOO
96 423.77	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	1		58MOO
96 348.03	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	2		58MOO
96 358.56	1	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3		58MOO
106 929.	1	$5p^5(^2P^\circ_{1/2})11d$	$^2[3/2]^\circ$	1		85YOS
96 462.63	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	1		58MOO
96 463.27	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2		58MOO
96 465.63	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	5		58MOO
96 465.72	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	4		58MOO
96 469.73	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	3		58MOO
96 470.39	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	2		58MOO
96 473.15	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	3		58MOO
96 473.15	0	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4		58MOO
96 472.13	1	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2		58MOO
96 480.62	1	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1		58MOO
96 601.6	0	$5p^5(^2P^\circ_{3/2})13p$	$^2[5/2]$	2		89HUI
96 606.77	0	$5p^5(^2P^\circ_{3/2})13p$	$^2[5/2]$	3		58MOO
96 616.90	0	$5p^5(^2P^\circ_{3/2})13p$	$^2[3/2]$	2		58MOO
96 634.09	0	$5p^5(^2P^\circ_{3/2})13p$	$^2[1/2]$	0		58MOO
96 608.6	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	0		98AHM
96 616.295	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	1		82LAB
96 622.710	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	4		82LAB
96 631.610	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	3		82LAB
96 627.017	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	2		82LAB
96 694.39	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	1		58MOO
96 641.306	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	2		82LAB
96 649.083	1	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3		82LAB
96 724.5	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	1		58MOO
96 725.3	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	2		89HUI
96 726.47	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[9/2]$	5		58MOO
96 726.56	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[9/2]$	4		58MOO
96 729.49	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	3		58MOO

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
96 730.1	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	2		98AHM
96 732.0	0	$5p^5(^2P^\circ_{3/2})10f$	$^2[7/2]$	3		98AHM
96 731.584	1	$5p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	2		82LAB
96 737.710	1	$5p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	1		82LAB
96 827.0	0	$5p^5(^2P^\circ_{3/2})14p$	$^2[5/2]$	2		89HUI
96 830.14	0	$5p^5(^2P^\circ_{3/2})14p$	$^2[5/2]$	3		58MOO
96 837.14	0	$5p^5(^2P^\circ_{3/2})14p$	$^2[3/2]$	2		58MOO
96 851.0	0	$5p^5(^2P^\circ_{3/2})14p$	$^2[1/2]$	0		89HUI
96 831.2	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	0		98AHM
96 836.723	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1		82LAB
96 842.085	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	4		82LAB
96 844.875	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	2		82LAB
96 848.494	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3		82LAB
96 855.664	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2		82LAB
96 861.540	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	3		82LAB
96 894.5	1	$5p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	1		85YOS
96 917.6	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[3/2]$	1		81GRA
96 918.6	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[3/2]$	2		89HUI
96 919.21	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[9/2]$	5		58MOO
96 919.21	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[9/2]$	4		58MOO
96 921.51	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[5/2]$	3		58MOO
96 922.2	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[5/2]$	2		98AHM
96 923.6	0	$5p^5(^2P^\circ_{3/2})11f$	$^2[7/2]$	3		98AHM
96 923.283	1	$5p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	2		82LAB
96 927.863	1	$5p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	1		82LAB
96 990.2	0	$5p^5(^2P^\circ_{3/2})15p$	$^2[1/2]$	1		81GRA
96 995.5	0	$5p^5(^2P^\circ_{3/2})15p$	$^2[5/2]$	2		89HUI
96 998.7	0	$5p^5(^2P^\circ_{3/2})15p$	$^2[5/2]$	3		58MOO
97 004.0	0	$5p^5(^2P^\circ_{3/2})15p$	$^2[3/2]$	2		89HUI
97 013.8	0	$5p^5(^2P^\circ_{3/2})15p$	$^2[1/2]$	0		89HUI
96 998.4	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[1/2]^\circ$	0		98AHM
97 002.451	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[1/2]^\circ$	1		82LAB
97 006.822	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[7/2]^\circ$	4		82LAB
97 008.710	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[3/2]^\circ$	2		82LAB
97 017.046	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[5/2]^\circ$	2		82LAB
97 011.593	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[7/2]^\circ$	3		82LAB
97 021.590	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[5/2]^\circ$	3		82LAB
97 046.4	1	$5p^5(^2P^\circ_{3/2})14d$	$^2[3/2]^\circ$	1		85YOS
97 064.6	0	$5p^5(^2P^\circ_{3/2})12f$	$^2[3/2]$	1		81GRA
97 065.3	0	$5p^5(^2P^\circ_{3/2})12f$	$^2[3/2]$	2		89HUI
97 068.1	0	$5p^5(^2P^\circ_{3/2})12f$	$^2[5/2]$	2		98AHM
97 069.2	0	$5p^5(^2P^\circ_{3/2})12f$	$^2[7/2]$	3		98AHM
97 068.986	1	$5p^5(^2P^\circ_{3/2})16s$	$^2[3/2]^\circ$	2		82LAB
97 072.525	1	$5p^5(^2P^\circ_{3/2})16s$	$^2[3/2]^\circ$	1		82LAB
97 121.1	0	$5p^5(^2P^\circ_{3/2})16p$	$^2[1/2]$	1		81GRA
97 124.8	0	$5p^5(^2P^\circ_{3/2})16p$	$^2[5/2]$	2		89HUI
97 131.4	0	$5p^5(^2P^\circ_{3/2})16p$	$^2[3/2]$	2		89HUI
97 139.0	0	$5p^5(^2P^\circ_{3/2})16p$	$^2[1/2]$	0		89HUI
97 127.115	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[1/2]^\circ$	0		82LAB
97 130.101	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[1/2]^\circ$	1		82LAB
97 133.664	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[7/2]^\circ$	4		82LAB
97 134.992	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[3/2]^\circ$	2		82LAB
97 137.316	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[7/2]^\circ$	3		82LAB
97 141.557	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[5/2]^\circ$	2		82LAB

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
97 145.141	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[5/2]^\circ$	3		82LAB
97 164.180	1	$5p^5(^2P^\circ_{3/2})15d$	$^2[3/2]^\circ$	1		82LAB
97 178.8	0	$5p^5(^2P^\circ_{3/2})13f$	$^2[3/2]$	1		81GRA
97 179.4	0	$5p^5(^2P^\circ_{3/2})13f$	$^2[3/2]$	2		89HUI
97 181.5	0	$5p^5(^2P^\circ_{3/2})13f$	$^2[5/2]$	2		98AHM
97 182.4	0	$5p^5(^2P^\circ_{3/2})13f$	$^2[7/2]$	3		98AHM
97 182.316	1	$5p^5(^2P^\circ_{3/2})17s$	$^2[3/2]^\circ$	2		82LAB
97 185.120	1	$5p^5(^2P^\circ_{3/2})17s$	$^2[3/2]^\circ$	1		82LAB
97 223.4	0	$5p^5(^2P^\circ_{3/2})17p$	$^2[1/2]$	1		81GRA
97 226.5	0	$5p^5(^2P^\circ_{3/2})17p$	$^2[5/2]$	2		89HUI
97 231.7	0	$5p^5(^2P^\circ_{3/2})17p$	$^2[3/2]$	2		89HUI
97 237.8	0	$5p^5(^2P^\circ_{3/2})17p$	$^2[1/2]$	0		89HUI
97 228.179	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[1/2]^\circ$	0		82LAB
97 230.5	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[1/2]^\circ$	1		85YOS
97 233.418	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[7/2]^\circ$	4		82LAB
97 234.379	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[3/2]^\circ$	2		82LAB
97 236.276	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[7/2]^\circ$	3		82LAB
97 239.641	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[5/2]^\circ$	2		82LAB
97 241.516	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[5/2]^\circ$	3		82LAB
97 257.488	1	$5p^5(^2P^\circ_{3/2})16d$	$^2[3/2]^\circ$	1		82LAB
97 269.	0	$5p^5(^2P^\circ_{3/2})14f$	$^2[3/2]$	1		81GRA
97 270.0	0	$5p^5(^2P^\circ_{3/2})14f$	$^2[3/2]$	2		89HUI
97 271.4	0	$5p^5(^2P^\circ_{3/2})14f$	$^2[5/2]$	2		98AHM
97 272.195	1	$5p^5(^2P^\circ_{3/2})18s$	$^2[3/2]^\circ$	2		82LAB
97 274.447	1	$5p^5(^2P^\circ_{3/2})18s$	$^2[3/2]^\circ$	1		82LAB
97 305.2	0	$5p^5(^2P^\circ_{3/2})18p$	$^2[1/2]$	1		81GRA
97 307.9	0	$5p^5(^2P^\circ_{3/2})18p$	$^2[5/2]$	2		89HUI
97 312.0	0	$5p^5(^2P^\circ_{3/2})18p$	$^2[3/2]$	2		89HUI
97 316.8	0	$5p^5(^2P^\circ_{3/2})18p$	$^2[1/2]$	0		89HUI
97 309.1	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[1/2]^\circ$	0		98AHM
97 310.8	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[1/2]^\circ$	1		85YOS
97 313.272	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[7/2]^\circ$	4		82LAB
97 313.986	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[3/2]^\circ$	2		82LAB
97 315.551	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[7/2]^\circ$	3		82LAB
97 318.266	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[5/2]^\circ$	2		82LAB
97 320.606	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[5/2]^\circ$	3		82LAB
97 332.598	1	$5p^5(^2P^\circ_{3/2})17d$	$^2[3/2]^\circ$	1		82LAB
97 342.3	0	$5p^5(^2P^\circ_{3/2})15f$	$^2[3/2]$	1		81GRA
97 342.9	0	$5p^5(^2P^\circ_{3/2})15f$	$^2[3/2]$	2		89HUI
97 344.5	0	$5p^5(^2P^\circ_{3/2})15f$	$^2[5/2]$	2		89HUI
97 344.679	1	$5p^5(^2P^\circ_{3/2})19s$	$^2[3/2]^\circ$	2		82LAB
97 346.555	1	$5p^5(^2P^\circ_{3/2})19s$	$^2[3/2]^\circ$	1		82LAB
97 371.6	0	$5p^5(^2P^\circ_{3/2})19p$	$^2[1/2]$	1		81GRA
97 373.7	0	$5p^5(^2P^\circ_{3/2})19p$	$^2[5/2]$	2		89HUI
97 377.2	0	$5p^5(^2P^\circ_{3/2})19p$	$^2[3/2]$	2		89HUI
97 381.0	0	$5p^5(^2P^\circ_{3/2})19p$	$^2[1/2]$	0		89HUI
97 374.6	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[1/2]^\circ$	0		98AHM
97 376.175	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[1/2]^\circ$	1		82LAB
97 378.188	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[7/2]^\circ$	4		82LAB
97 378.731	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[3/2]^\circ$	2		82LAB
97 380.036	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[7/2]^\circ$	3		82LAB
97 382.258	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[5/2]^\circ$	2		82LAB
97 384.187	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[5/2]^\circ$	3		82LAB

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
97 393.946	1	$5p^5(^2P^\circ_{3/2})18d$	$^2[3/2]^\circ$	1		82LAB
97 402.2	0	$5p^5(^2P^\circ_{3/2})16f$	$^2[3/2]$	1		81GRA
97 402.4	0	$5p^5(^2P^\circ_{3/2})16f$	$^2[3/2]$	2		89HUI
97 403.8	0	$5p^5(^2P^\circ_{3/2})16f$	$^2[5/2]$	2		89HUI
97 403.985	1	$5p^5(^2P^\circ_{3/2})20s$	$^2[3/2]^\circ$	2		82LAB
97 405.556	1	$5p^5(^2P^\circ_{3/2})20s$	$^2[3/2]^\circ$	1		82LAB
97 428.1	0	$5p^5(^2P^\circ_{3/2})20p$	$^2[5/2]$	2		89HUI
97 431.0	0	$5p^5(^2P^\circ_{3/2})20p$	$^2[3/2]$	2		89HUI
97 434.2	0	$5p^5(^2P^\circ_{3/2})20p$	$^2[1/2]$	0		89HUI
97 428.6	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[1/2]^\circ$	0		98AHM
97 429.982	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[1/2]^\circ$	1		82LAB
97 431.677	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[7/2]^\circ$	4		82LAB
97 432.098	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[3/2]^\circ$	2		82LAB
97 433.195	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[7/2]^\circ$	3		82LAB
97 435.037	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[5/2]^\circ$	2		82LAB
97 436.646	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[5/2]^\circ$	3		82LAB
97 444.695	1	$5p^5(^2P^\circ_{3/2})19d$	$^2[3/2]^\circ$	1		82LAB
97 451.6	0	$5p^5(^2P^\circ_{3/2})17f$	$^2[3/2]$	1		81GRA
97 452.2	0	$5p^5(^2P^\circ_{3/2})17f$	$^2[3/2]$	2		89HUI
97 453.2	0	$5p^5(^2P^\circ_{3/2})17f$	$^2[5/2]$	2		89HUI
97 473.6	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[1/2]^\circ$	0		98AHM
97 474.831	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[1/2]^\circ$	1		82LAB
97 476.269	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[7/2]^\circ$	4		82LAB
97 476.602	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[3/2]^\circ$	2		82LAB
97 477.532	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[7/2]^\circ$	3		82LAB
97 479.076	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[5/2]^\circ$	2		82LAB
97 480.431	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[5/2]^\circ$	3		82LAB
97 487.150	1	$5p^5(^2P^\circ_{3/2})20d$	$^2[3/2]^\circ$	1		82LAB
97 493.0	0	$5p^5(^2P^\circ_{3/2})18f$	$^2[3/2]$	1		81GRA
97 493.5	0	$5p^5(^2P^\circ_{3/2})18f$	$^2[3/2]$	2		89HUI
97 494.3	0	$5p^5(^2P^\circ_{3/2})18f$	$^2[5/2]$	2		89HUI
97 528.1	0	$5p^5(^2P^\circ_{3/2})19f$	$^2[3/2]$	1		81GRA
97 528.5	0	$5p^5(^2P^\circ_{3/2})19f$	$^2[3/2]$	2		89HUI
97 529.2	0	$5p^5(^2P^\circ_{3/2})19f$	$^2[5/2]$	2		89HUI
97 557.9	0	$5p^5(^2P^\circ_{3/2})20f$	$^2[3/2]$	1		81GRA
106 649.6	1	$5p^5(^2P^\circ_{1/2})12s$	$^2[1/2]^\circ$	1		85YOS
107 011.7	1	$5p^5(^2P^\circ_{1/2})13s$	$^2[1/2]^\circ$	1		85YOS
107 270.5	1	$5p^5(^2P^\circ_{1/2})14s$	$^2[1/2]^\circ$	1		85YOS
107 461.7	1	$5p^5(^2P^\circ_{1/2})15s$	$^2[1/2]^\circ$	1		85YOS
107 607.2	1	$5p^5(^2P^\circ_{1/2})16s$	$^2[1/2]^\circ$	1		85YOS
107 720.2	1	$5p^5(^2P^\circ_{1/2})17s$	$^2[1/2]^\circ$	1		85YOS
107 810.0	1	$5p^5(^2P^\circ_{1/2})18s$	$^2[1/2]^\circ$	1		85YOS
107 882.3	1	$5p^5(^2P^\circ_{1/2})19s$	$^2[1/2]^\circ$	1		85YOS
107 941.5	1	$5p^5(^2P^\circ_{1/2})20s$	$^2[1/2]^\circ$	1		85YOS
107 209.	1	$5p^5(^2P^\circ_{1/2})12d$	$^2[3/2]^\circ$	1		85YOS
107 415.	1	$5p^5(^2P^\circ_{1/2})13d$	$^2[3/2]^\circ$	1		85YOS
107 571.5	1	$5p^5(^2P^\circ_{1/2})14d$	$^2[3/2]^\circ$	1		85YOS
107 692.4	1	$5p^5(^2P^\circ_{1/2})15d$	$^2[3/2]^\circ$	1		85YOS
107 787.6	1	$5p^5(^2P^\circ_{1/2})16d$	$^2[3/2]^\circ$	1		85YOS
107 864.2	1	$5p^5(^2P^\circ_{1/2})17d$	$^2[3/2]^\circ$	1		85YOS
107 926.5	1	$5p^5(^2P^\circ_{1/2})18d$	$^2[3/2]^\circ$	1		85YOS
107 978.1	1	$5p^5(^2P^\circ_{1/2})19d$	$^2[3/2]^\circ$	1		85YOS
108 021.3	1	$5p^5(^2P^\circ_{1/2})20d$	$^2[3/2]^\circ$	1		85YOS

Energy levels of Xe I–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
168 985.	1	$5s5p^6(^2S^\circ_{1/2})6p$	°	1		72COD
179 266.	1	$5s5p^6(^2S^\circ_{1/2})7p$	°	1		72COD
183 123.	1	$5s5p^6(^2S^\circ_{1/2})8p$	°	1		72COD
185 000.	1	$5s5p^6(^2S^\circ_{1/2})9p$	°	1		72COD
186 060.	1	$5s5p^6(^2S^\circ_{1/2})10p$	°	1		72COD
186 724.	1	$5s5p^6(^2S^\circ_{1/2})11p$	°	1		72COD
187 171.	1	$5s5p^6(^2S^\circ_{1/2})12p$	°	1		72COD
187 498.	1	$5s5p^6(^2S^\circ_{1/2})13p$	°	1		72COD
187 702.	1	$5s5p^6(^2S^\circ_{1/2})14p$	°	1		72COD
188 249.	1	$5s5p^6(^2S^\circ_{1/2})19p$	°	1		72COD
188 349.	1	$5s5p^6(^2S^\circ_{1/2})21p$	°	1		72COD
188 384.	1	$5s5p^6(^2S^\circ_{1/2})22p$	°	1		72COD
188 416.	1	$5s5p^6(^2S^\circ_{1/2})23p$	°	1		72COD
181 567.	1	$5p^4(^3P)6s(^4P_{5/2})7p$	°	1		72COD
185 415.	1	$5p^4(^3P)6s(^4P_{5/2})8p$	°	1		72COD
187 063.	1	$5p^4(^3P)6s(^4P_{5/2})9p$	°	1		72COD
188 193.	1	$5p^4(^3P)6s(^4P_{5/2})10p$	°	1		72COD
188 914.	1	$5p^4(^3P)6s(^4P_{5/2})11p$	°	1		72COD
189 376.	1	$5p^4(^3P)6s(^4P_{5/2})12p$	°	1		72COD
183 763.	1	$5p^4(^3P)6s(^4P_{3/2})7p$	°	1		72COD
187 498.	1	$5p^4(^3P)6s(^4P_{3/2})8p$	°	1		72COD
189 243.	1	$5p^4(^3P)6s(^4P_{3/2})9p$	°	1		72COD
190 197.	1	$5p^4(^3P)6s(^4P_{3/2})10p$	°	1		72COD
212 558.	1	$5p^4(^3P)6p(^4D^\circ_{3/2})10d$	°	1		72COD
213 038.	1	$5p^4(^3P)6p(^4D^\circ_{3/2})11d$	°	1		72COD
213 370.	1	$5p^4(^3P)6p(^4D^\circ_{3/2})12d$	°	1		72COD
213 607.	1	$5p^4(^3P)6p(^4D^\circ_{3/2})13d$	°	1		72COD
216 920.	1	$5p^4(^3P)6p(^4S^\circ_{3/2})9d$	°	1		72COD
217 543.	1	$5p^4(^3P)6p(^4S^\circ_{3/2})10d$	°	1		72COD
218 041.	1	$5p^4(^3P)6p(^4S^\circ_{3/2})11d$	°	1		72COD
218 322.	1	$5p^4(^3P)6p(^4S^\circ_{3/2})12d$	°	1		72COD
220 099.	1	$5p^4(^1S)5d(^2D_{3/2})11p$	°	1		72COD
220 546.	1	$5p^4(^1S)5d(^2D_{3/2})12p$	°	1		72COD
221 068.	1	$5p^4(^1S)5d(^2D_{3/2})13p$	°	1		72COD
224 411.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})8d$	°	1		72COD
225 362.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})9d$	°	1		72COD
226 035.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})10d$	°	1		72COD
226 521.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})11d$	°	1		72COD
226 752.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})12d$	°	1		72COD
226 968.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})13d$	°	1		72COD
227 102.	1	$5p^4(^1D)6p(^2F^\circ_{7/2})14d$	°	1		72COD
230 234.	1	$5p^4(^3P)7s(^4P_{1/2})10p$	°	1		72COD
230 787.	1	$5p^4(^3P)7s(^4P_{1/2})11p$	°	1		72COD
231 315.	1	$5p^4(^3P)7s(^4P_{1/2})12p$	°	1		72COD
231 723.	1	$5p^4(^3P)7s(^4P_{1/2})13p$	°	1		72COD
231 879.	1	$5p^4(^3P)7s(^4P_{1/2})14p$	°	1		72COD
232 072.	1	$5p^4(^3P)7s(^4P_{1/2})15p$	°	1		72COD
232 218.	1	$5p^4(^3P)7s(^4P_{1/2})16p$	°	1		72COD
232 315.	1	$5p^4(^3P)7s(^4P_{1/2})17p$	°	1		72COD
232 391.	1	$5p^4(^3P)7s(^4P_{1/2})18p$	°	1		72COD

Spectral lines of Xe I

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
430.31	232 390	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})18p$	$^\circ$	1	0.05	72COD
430.45	232 320	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})17p$	$^\circ$	1	0.05	72COD
430.63	232 220	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})16p$	$^\circ$	1	0.05	72COD
430.90	232 070	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})15p$	$^\circ$	1	0.05	72COD
431.26	231 880	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})14p$	$^\circ$	1	0.05	72COD
431.55	231 720	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})13p$	$^\circ$	1	0.05	72COD
432.31	231 320	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})12p$	$^\circ$	1	0.05	72COD
433.30	230 790	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})11p$	$^\circ$	1	0.05	72COD
434.34	230 230	a	$5p^6$	^1S	0	–	$5p^4(^3P)7s(^4P_{1/2})10p$	$^\circ$	1	0.05	72COD
440.33	227 100	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})14d$	$^\circ$	1	0.07	72COD
440.59	226 970	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})13d$	$^\circ$	1	0.07	72COD
441.01	226 750	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})12d$	$^\circ$	1	0.07	72COD
441.46	226 520	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})11d$	$^\circ$	1	0.1	72COD
442.41	226 030	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})10d$	$^\circ$	1	0.07	72COD
443.73	225 360	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})9d$	$^\circ$	1	0.07	72COD
445.61	224 410	a	$5p^6$	^1S	0	–	$5p^4(^1D)6p(^2F^\circ_{7/2})8d$	$^\circ$	1	0.05	72COD
452.35	221 070	a	$5p^6$	^1S	0	–	$5p^4(^1S)5d(^2D_{3/2})13p$	$^\circ$	1	0.1	72COD
453.42	220 550	a	$5p^6$	^1S	0	–	$5p^4(^1S)5d(^2D_{3/2})12p$	$^\circ$	1	0.05	72COD
454.34	220 100	a	$5p^6$	^1S	0	–	$5p^4(^1S)5d(^2D_{3/2})11p$	$^\circ$	1	0.05	72COD
458.04	218 320	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4S^\circ_{3/2})12d$	$^\circ$	1	0.05	72COD
458.63	218 040	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4S^\circ_{3/2})11d$	$^\circ$	1	0.05	72COD
459.68	217 540	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4S^\circ_{3/2})10d$	$^\circ$	1	0.05	72COD
461.00	216 920	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4S^\circ_{3/2})9d$	$^\circ$	1	0.05	72COD
468.15	213 610	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4D^\circ_{3/2})13d$	$^\circ$	1	0.05	72COD
468.67	213 370	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4D^\circ_{3/2})12d$	$^\circ$	1	0.05	72COD
469.40	213 040	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4D^\circ_{3/2})11d$	$^\circ$	1	0.05	72COD
470.46	212 560	a	$5p^6$	^1S	0	–	$5p^4(^3P)6p(^4D^\circ_{3/2})10d$	$^\circ$	1	0.05	72COD
525.77	190 197.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{3/2})10p$	$^\circ$	1	0.02	72COD
528.05	189 376.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{5/2})12p$	$^\circ$	1	0.05	72COD
528.42	189 243.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{3/2})9p$	$^\circ$	1	0.03	72COD
529.34	188 914.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{5/2})11p$	$^\circ$	1	0.02	72COD
530.74	188 416.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})23p$	$^\circ$	1	0.03	72COD
530.83	188 384.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})22p$	$^\circ$	1	0.03	72COD
530.93	188 349.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})21p$	$^\circ$	1	0.02	72COD
531.21	188 249.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})19p$	$^\circ$	1	0.02	72COD
531.37	188 193.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{5/2})10p$	$^\circ$	1	0.02	72COD
532.76	187 702.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})14p$	$^\circ$	1	0.02	72COD
533.34	187 498.	a*	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})13p$	$^\circ$	1	0.05	72COD
533.34	187 498.	a*	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{3/2})8p$	$^\circ$	1	0.05	72COD
534.27	187 171.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})12p$	$^\circ$	1	0.02	72COD
534.58	187 063.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{5/2})9p$	$^\circ$	1	0.02	72COD
535.55	186 724.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})11p$	$^\circ$	1	0.02	72COD
537.46	186 060.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})10p$	$^\circ$	1	0.02	72COD
539.33	185 415.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{5/2})8p$	$^\circ$	1	0.02	72COD
540.54	185 000.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})9p$	$^\circ$	1	0.02	72COD
544.18	183 763.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{3/2})7p$	$^\circ$	1	0.02	72COD
546.08	183 123.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})8p$	$^\circ$	1	0.02	72COD
550.76	181 567.	a	$5p^6$	^1S	0	–	$5p^4(^3P)6s(^4P_{5/2})7p$	$^\circ$	1	0.02	72COD
557.83	179 266.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})7p$	$^\circ$	1	0.02	72COD
591.77	168 985.	a	$5p^6$	^1S	0	–	$5s5p^6(^2S^\circ_{1/2})6p$	$^\circ$	1	0.03	72COD
925.743	108 021.3	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})20d$	$^2[3/2]^\circ$	1	0.002	85YOS
926.114	107 978.1	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})19d$	$^2[3/2]^\circ$	1	0.002	85YOS
926.428	107 941.5	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})20s$	$^2[1/2]^\circ$	1	0.002	85YOS
926.556	107 926.6	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})18d$	$^2[3/2]^\circ$	1	0.002	85YOS
926.936	107 882.3	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})19s$	$^2[1/2]^\circ$	1	0.002	85YOS
927.558	107 810.0	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})18s$	$^2[1/2]^\circ$	1	0.002	85YOS
927.750	107 787.7	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})16d$	$^2[3/2]^\circ$	1	0.002	85YOS
928.331	107 720.2	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})17s$	$^2[1/2]^\circ$	1	0.002	85YOS
928.571	107 692.4	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})15d$	$^2[3/2]^\circ$	1	0.002	85YOS
929.306	107 607.2	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})16s$	$^2[1/2]^\circ$	1	0.002	85YOS
929.614	107 571.5	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})14d$	$^2[3/2]^\circ$	1	0.002	85YOS

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
930.564	107 461.7	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})15s$	$^2[1/2]^\circ$	1	0.002	85YOS
930.97	107 414.8	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})13d$	$^2[3/2]^\circ$	1	0.01	85YOS
932.223	107 270.5	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})14s$	$^2[1/2]^\circ$	1	0.002	85YOS
932.76	107 208.7	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})12d$	$^2[3/2]^\circ$	1	0.01	85YOS
934.477	107 011.7	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})13s$	$^2[1/2]^\circ$	1	0.002	85YOS
935.20	106 929.0	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})11d$	$^2[3/2]^\circ$	1	0.01	85YOS
937.650	106 649.6	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})12s$	$^2[1/2]^\circ$	1	0.002	85YOS
938.72	106 528.0	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	1	0.01	85YOS
942.322	106 120.8	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})11s$	$^2[1/2]^\circ$	1	0.002	85YOS
943.92	105 941.2	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})9d$	$^2[1/2]^\circ$	1	0.01	85YOS
949.634	105 303.7	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.002	85YOS
952.26	105 013.3	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.01	85YOS
961.96	103 954.	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.15	35BEU
966.9	103 423.	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.15	35BEU
985.94	101 426.	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.15	35BEU
995.8	100 422.	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.15	35BEU
1025.777	97 487.08	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})20d$	$^2[3/2]^\circ$	1	0.002	85YOS
1025.906	97 474.82	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})20d$	$^2[1/2]^\circ$	1	0.002	85YOS
1026.223	97 444.71	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})19d$	$^2[3/2]^\circ$	1	0.002	85YOS
1026.378	97 429.99	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})19d$	$^2[1/2]^\circ$	1	0.002	85YOS
1026.637	97 405.41	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})20s$	$^2[3/2]^\circ$	1	0.002	85YOS
1026.758	97 393.93	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})18d$	$^2[3/2]^\circ$	1	0.002	85YOS
1026.946	97 376.10	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})18d$	$^2[1/2]^\circ$	1	0.002	85YOS
1027.260	97 346.34	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})19s$	$^2[3/2]^\circ$	1	0.002	85YOS
1027.405	97 332.60	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})17d$	$^2[3/2]^\circ$	1	0.002	85YOS
1027.635	97 310.82	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})17d$	$^2[1/2]^\circ$	1	0.002	85YOS
1028.020	97 274.37	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})18s$	$^2[3/2]^\circ$	1	0.002	85YOS
1028.198	97 257.53	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})16d$	$^2[3/2]^\circ$	1	0.002	85YOS
1028.484	97 230.49	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})16d$	$^2[1/2]^\circ$	1	0.002	85YOS
1028.966	97 184.94	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})17s$	$^2[3/2]^\circ$	1	0.002	85YOS
1029.186	97 164.17	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[3/2]^\circ$	1	0.002	85YOS
1029.546	97 130.19	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[1/2]^\circ$	1	0.002	85YOS
1030.159	97 072.39	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})16s$	$^2[3/2]^\circ$	1	0.002	85YOS
1030.435	97 046.39	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})14d$	$^2[3/2]^\circ$	1	0.002	85YOS
1030.902	97 002.43	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})14d$	$^2[1/2]^\circ$	1	0.002	85YOS
1031.696	96 927.78	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	1	0.002	85YOS
1032.050	96 894.53	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	1	0.002	85YOS
1032.666	96 836.73	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	0.002	85YOS
1033.724	96 737.62	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	1	0.002	85YOS
1034.184	96 694.59	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	1	0.002	85YOS
1035.022	96 616.30	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	1	0.002	85YOS
1036.476	96 480.77	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1	0.002	85YOS
1037.087	96 423.93	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	1	0.002	85YOS
1038.259	96 315.08	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	0.002	85YOS
1040.336	96 122.79	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.002	85YOS
1041.170	96 045.79	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.002	85YOS
1042.613	95 912.87	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1	0.002	85YOS
1043.834 97	95 800.584	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.00003	01BRA
1046.123	95 591.05	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.002	85YOS
1047.136	95 498.58	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.002	85YOS
1050.107	95 228.39	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.002	85YOS
1054.996	94 787.09	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.002	85YOS
1056.128 29	94 685.467	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.00003	01BRA
1061.255 64	94 228.003	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.00003	01BRA
1068.168	93 618.23	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.002	85YOS
1070.411	93 422.06	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.002	85YOS
1078.584	92 714.15	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.002	85YOS
1085.441	92 128.45	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.002	85YOS
1099.716	90 932.57	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.002	85YOS
1110.713	90 032.26	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.002	85YOS
1129.310	88 549.65	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.002	85YOS
1170.413	85 439.93	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.002	85YOS
1192.037	83 890.01	a	$5p^6$	^1S	0	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.002	85YOS

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1250.210	79 986.56	a	$5p^6$	^{1}S	0	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.002	85YOS
1295.588	77 185.03	a	$5p^6$	^{1}S	0	–	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.002	85YOS
1469.610	68 045.26		$5p^6$	^{1}S	0	–	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.003	64PET

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3340.04	29 931.15	1-	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})15p$	$^2[5/2]$	3	0.01	33HUM
3348.63	29 854.38	1-	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[5/2]$	3	0.01	33HUM
3358.17	29 769.57	1h-	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})14p$	$^2[3/2]$	2	0.01	33HUM
3358.96	29 762.57	1h-	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})14p$	$^2[5/2]$	3	0.01	33HUM
3370.34	29 662.08	1h	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	3	0.01	33HUM
3383.20	29 549.33	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})13p$	$^2[3/2]$	2	0.01	33HUM
3384.36	29 539.20	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})13p$	$^2[5/2]$	3	0.01	33HUM
3400.07	29 402.72	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	3	0.01	33HUM
3400.79	29 396.50	1-	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	0.01	33HUM
3418.37	29 245.32	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	2	0.01	33HUM
3420.00	29 231.38	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	3	0.01	33HUM
3442.66	29 038.98	3	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	3	0.01	33HUM
3443.83	29 029.12	1*	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2	0.01	33HUM
3443.83	29 029.12	1*	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.01	33HUM
3469.81	28 811.77	4	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	2	0.01	33HUM
3472.36	28 790.61	4	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	3	0.01	33HUM
3496.86	28 588.90	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})13p$	$^2[1/2]$	0	0.01	33HUM
3506.74	28 508.36	5	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.01	33HUM
3508.42	28 494.71	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.01	33HUM
3517.90	28 417.92	2*	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	0.01	33HUM
3517.90	28 417.92	2*	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	1	0.01	33HUM
3533.48	28 292.63	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	0	0.01	33HUM
3536.61	28 267.59	1-	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	2	0.01	33HUM
3537.35	28 261.67	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	1	0.01	33HUM
3549.86	28 162.08	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.01	33HUM
3554.04	28 128.96	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	0.01	33HUM
3555.92	28 114.09	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	0.01	33HUM
3563.80	28 051.92	3	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2	0.01	33HUM
3587.02	27 870.34	4	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[1/2]$	0	0.01	33HUM
3591.67	27 834.26	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	2	0.01	33HUM
3592.80	27 825.50	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	1	0.01	33HUM
3610.32	27 690.48	15	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.01	33HUM
3613.06	27 669.48	8	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.01	33HUM
3633.06	27 517.16	6	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.01	33HUM
3669.91	27 240.87	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	0	0.01	33HUM
3677.54	27 184.35	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.01	33HUM
3679.31	27 171.27	4	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1	0.01	33HUM
3685.90	27 122.69	40	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.01	33HUM
3688.80	27 101.37	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.01	33HUM
3693.49	27 066.96	40	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	0.01	33HUM
3696.82	27 042.58	4	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.01	33HUM
3702.74	26 999.34	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	1	0.01	33HUM
3737.81	26 746.0	5	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	0.2	58THE
3742.22	26 714.51	1	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.01	33HUM
3745.38	26 691.97	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.01	33HUM
3745.69	26 689.76	4	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.01	33HUM
3795.95	26 336.39	3	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.01	33HUM
3796.30	26 333.96	40	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.01	33HUM
3801.39	26 298.70	30	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.01	33HUM
3801.90	26 295.17	3	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.01	33HUM
3809.84	26 240.37	30	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.01	33HUM
3823.74	26 144.99	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.01	33HUM
3826.86	26 123.67	15	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.01	33HUM
3835.6	26 064.1	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.1	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3877.20	25 784.5	2*	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	2	0.2	58THE
3877.20	25 784.5	2*	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	3	0.2	58THE
3942.29	25 358.79	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.01	33HUM
3948.163	25 321.068	60	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.002	34MEG
3948.72	25 317.50	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.01	33HUM
3950.924	25 303.374	120	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.002	34MEG
3956.85	25 265.48	6	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.01	33HUM
3967.5411	25 197.399	200	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	0.0005	34MEG
3974.417	25 153.807	40	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.002	34MEG
3985.202	25 085.736	30	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.002	34MEG
4004.55	24 964.5	10*	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.2	58THE
4004.55	24 964.5	10*	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.2	58THE
4078.8202	24 509.973	100	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0	0.0005	34MEG
4109.7089	24 325.759	60	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.0005	34MEG
4116.1147	24 287.903	80	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.0005	34MEG
4123.55	24 244.1	10	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.2	58THE
4135.133	24 176.200	20	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.002	34MEG
4146.78	24 108.30	2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.01	33HUM
4175.17	23 944.4	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	0.2	58THE
4193.01	23 842.50	20	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.01	33HUM
4193.528	23 839.552	150	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.002	34MEG
4203.695	23 781.895	50hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.002	34MEG
4205.404	23 772.231	10	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.002	34MEG
4235.03	23 605.9	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.2	58THE
4279.16	23 362.5	2*	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3	0.2	58THE
4279.16	23 362.5	2*	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.2	58THE
4354.59	22 957.8	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4	0.2	58THE
4372.287	22 864.901	20	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.002	34MEG
4383.908	22 804.291	100	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.002	34MEG
4385.768	22 794.619	70	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.002	34MEG
4500.978	22 211.163	500hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.002	34MEG
4524.6805	22 094.812	400hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.0005	34MEG
4543.99	22 000.9	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	0.2	58THE
4576.60	21 844.16	2E2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	0.01	33HUM
4582.7472	21 814.859	300hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.0005	34MEG
4611.8882	21 677.021	100	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.0005	34MEG
4624.2756	21 618.954	1000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.0005	34MEG
4662.26	21 442.8	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.2	58THE
4671.2258	21 401.666	2000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	0.0005	34MEG
4690.970	21 311.588	100	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.002	34MEG
4697.0208	21 284.135	300hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.0005	34MEG
4708.21	21 233.55	5	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.01	33HUM
4734.1518	21 117.201	600hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.0005	34MEG
4737.49	21 102.3	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	0.2	58THE
4792.619	20 859.587	150hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.002	34MEG
4807.0190	20 797.101	500hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.0005	34MEG
4829.708	20 699.401	400	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.002	34MEG
4843.2934	20 641.341	300	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.0005	34MEG
4916.507	20 333.967	500hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.002	34MEG
4923.152	20 306.521	500	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.002	34MEG
5023.88	19 899.38	3h	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.01	33HUM
5028.2794	19 881.9739	200	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.0005	34MEG
5116.46	19 539.32	0	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	1	0.03	30GRE
5127.24	19 498.2	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	0.2	58THE
5162.711	19 364.274	10	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.002	34MEG
5164.39	19 357.98	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	2	0.01	33HUM
5167.30	19 347.08	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	1	0.01	33HUM
5185.85	19 277.87	2h*	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	0.01	33HUM
5185.85	19 277.87	2h*	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	1	0.01	33HUM
5206.07	19 203.00	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.01	33HUM
5245.27	19 059.49	4h	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2	0.01	33HUM
5248.98	19 046.02	4h	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	0.01	33HUM
5251.89	19 035.47	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	0	0.01	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5273.48	18 957.53	1h	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1	0.01	33HUM
5283.30	18 922.30	2h	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	2	0.01	33HUM
5286.11	18 912.24	4h	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2	0.01	33HUM
5286.38	18 911.27	3h	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.01	33HUM
5306.37	18 840.03	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.01	33HUM
5335.91	18 735.73	1h-	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2	0.01	33HUM
5337.89	18 728.78	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3	0.01	33HUM
5356.80	18 662.67	1	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})20s$	$^2[1/2]^\circ$	1	0.01	33HUM
5362.244	18 643.724	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1	0.002	34MEG
5364.626	18 635.446	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.002	34MEG
5367.03	18 627.10	6	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	0	0.01	33HUM
5373.74	18 603.84	1h-	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})14d$	$^2[7/2]^\circ$	4	0.01	33HUM
5392.795	18 538.106	100	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.002	34MEG
5394.738	18 531.429	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.002	34MEG
5397.63	18 521.50	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	2	0.01	33HUM
5400.45	18 511.83	4h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	3	0.01	33HUM
5418.02	18 451.80	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.01	33HUM
5421.76	18 439.07	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	4	0.01	33HUM
5435.60	18 392.12	5h	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.01	33HUM
5439.923	18 377.505	30	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.002	34MEG
5440.39	18 375.93	15	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.01	33HUM
5444.87	18 360.81	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1	0.01	33HUM
5454.54	18 328.26	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	2	0.01	33HUM
5456.45	18 321.84	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.01	33HUM
5460.037	18 309.806	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.002	34MEG
5479.12	18 246.04	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3	0.01	33HUM
5481.33	18 238.68	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3	0.01	33HUM
5484.16	18 229.27	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.01	33HUM
5484.46	18 228.27	4h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	2	0.01	33HUM
5487.03	18 219.73	6h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	4	0.01	33HUM
5488.555	18 214.671	20h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	3	0.002	34MEG
5523.05	18 100.91	1	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	0	0.03	30GRE
5532.78	18 069.08	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.01	33HUM
5540.38	18 044.29	3h*	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.01	33HUM
5540.38	18 044.29	3h*	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.01	33HUM
5552.385	18 005.278	80	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.002	34MEG
5553.10	18 002.96	3h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.01	33HUM
5555.06	17 996.61	1-	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	0.01	33HUM
5557.28	17 989.42	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.01	33HUM
5563.50	17 969.31	2	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1	0.01	33HUM
5566.615	17 959.251	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.002	34MEG
5567.77	17 955.53	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3	0.01	33HUM
5575.27	17 931.37	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	3	0.01	33HUM
5579.28	17 918.48	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	4	0.01	33HUM
5581.784	17 910.446	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	0	0.002	34MEG
5585.18	17 899.56	1-	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2	0.01	33HUM
5594.37	17 870.15	6	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	1	0.01	33HUM
5607.99	17 826.75	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	0.01	33HUM
5612.65	17 811.95	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.01	33HUM
5618.878	17 792.208	80	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3	0.002	34MEG
5621.24	17 784.73	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.01	33HUM
5646.19	17 706.14	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.01	33HUM
5652.84	17 685.31	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	2	0.01	33HUM
5654.31	17 680.72	1h-	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.01	33HUM
5664.46	17 649.04	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	3	0.01	33HUM
5688.373	17 574.843	40	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.002	34MEG
5695.750	17 552.080	100	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.002	34MEG
5696.477	17 549.840	80	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.002	34MEG
5698.54	17 543.49	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	0.01	33HUM
5703.34	17 528.72	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.01	33HUM
5706.87	17 517.88	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.01	33HUM
5709.80	17 508.89	10h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3	0.01	33HUM
5712.21	17 501.50	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.01	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5715.716	17 490.769	70	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.002	34MEG
5716.252	17 489.128	80	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	4	0.002	34MEG
5722.14	17 471.13	15h	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.01	33HUM
5723.26	17 467.71	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	1	0.01	33HUM
5726.10	17 459.05	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.01	33HUM
5733.48	17 436.58	4h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3	0.01	33HUM
5740.17	17 416.26	6	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.01	33HUM
5740.73	17 414.56	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	2	0.01	33HUM
5748.20	17 391.93	8h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	2	0.01	33HUM
5754.60	17 372.58	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2	0.01	33HUM
5792.26	17 259.63	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.01	33HUM
5807.311	17 214.900	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	0.002	34MEG
5814.505	17 193.602	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.002	34MEG
5820.52	17 175.83	25	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.01	33HUM
5823.890	17 165.895	300	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.002	34MEG
5824.800	17 163.213	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3	0.002	34MEG
5827.72	17 154.61	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.01	33HUM
5830.63	17 146.05	20h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3	0.01	33HUM
5840.83	17 116.11	4h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2	0.01	33HUM
5843.43	17 108.49	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.01	33HUM
5845.46	17 102.55	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	0.01	33HUM
5846.21	17 100.36	2	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.01	33HUM
5849.85	17 089.72	3h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.01	33HUM
5856.509	17 070.287	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.002	34MEG
5875.018	17 016.508	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.002	34MEG
5878.92	17 005.21	6	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.01	33HUM
5889.12	16 975.76	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.01	33HUM
5894.988	16 958.863	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.002	34MEG
5895.62	16 957.05	2h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1	0.01	33HUM
5898.56	16 948.59	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.01	33HUM
5904.462	16 931.652	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	0.002	34MEG
5906.76	16 925.06	3	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.01	33HUM
5911.90	16 910.35	5*	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.01	33HUM
5911.90	16 910.35	5*	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.01	33HUM
5916.65	16 896.77	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.01	33HUM
5921.85	16 881.94	10	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	1	0.01	33HUM
5922.550	16 879.942	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3	0.002	34MEG
5925.56	16 871.37	6	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.01	33HUM
5931.241	16 855.208	80	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0	0.002	34MEG
5934.172	16 846.883	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	4	0.002	34MEG
5963.28	16 764.7	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.2	55THE
5972.82	16 737.87	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	1	0.01	33HUM
5974.152	16 734.142	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	0.002	34MEG
5978.29	16 722.56	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[9/2]$	5	0.01	33HUM
5979.42	16 719.40	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.01	33HUM
5986.23	16 700.38	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1	0.01	33HUM
5989.18	16 692.15	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.01	33HUM
5998.115	16 667.288	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.002	34MEG
6007.909	16 640.118	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.002	34MEG
6009.78	16 634.94	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.01	33HUM
6014.10	16 622.99	1h	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.01	33HUM
6022.89	16 598.73	1h-	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[5/2]$	3	0.01	33HUM
6026.76	16 588.07	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.01	33HUM
6029.78	16 579.8	15*	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.2	58THE
6029.78	16 579.8	15*	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.2	58THE
6031.36	16 575.42	1h-	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	1	0.01	33HUM
6034.92	16 565.64	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.01	33HUM
6043.38	16 542.45	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.01	33HUM
6048.00	16 529.81	6h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[9/2]$	5	0.01	33HUM
6064.91	16 483.73	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	2	0.01	33HUM
6067.52	16 476.64	2h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	0.01	33HUM
6067.77	16 475.96	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	1	0.01	33HUM
6093.38	16 406.71	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	3	0.01	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
6095.15	16 401.95	1-	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	1	0.01	33HUM
6103.88	16 378.49	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.01	33HUM
6108.37	16 366.45	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.01	33HUM
6111.761	16 357.369	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.002	34MEG
6111.951	16 356.860	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.002	34MEG
6114.86	16 349.08	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.01	33HUM
6123.91	16 324.92	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.01	33HUM
6126.36	16 318.39	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.01	33HUM
6131.47	16 304.79	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	1	0.01	33HUM
6142.13	16 276.49	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4	0.01	33HUM
6143.70	16 272.33	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.01	33HUM
6144.97	16 268.97	20hw	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	5	0.01	33HUM
6152.070	16 250.194	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	0.002	34MEG
6162.16	16 223.59	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	0	0.01	33HUM
6163.661	16 219.635	90	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.002	34MEG
6163.935	16 218.914	80	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.002	34MEG
6178.303	16 181.197	150	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.002	34MEG
6179.665	16 177.630	120	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.002	34MEG
6182.420	16 170.421	300	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	0.002	34MEG
6184.16	16 165.87	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.01	33HUM
6189.10	16 152.97	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.01	33HUM
6191.40	16 146.97	4h	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	3	0.01	33HUM
6193.89	16 140.48	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	0.01	33HUM
6195.49	16 136.31	1	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.01	33HUM
6198.260	16 129.097	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.002	34MEG
6200.892	16 122.251	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	0.002	34MEG
6201.49	16 120.70	3h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	2	0.01	33HUM
6205.35	16 110.67	6h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2	0.01	33HUM
6205.75	16 109.63	4	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.01	33HUM
6206.297	16 108.211	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.002	34MEG
6209.11	16 100.91	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.01	33HUM
6220.84	16 070.55	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3	0.01	33HUM
6224.168	16 061.961	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.002	34MEG
6230.81	16 044.8	4*	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.2	58THE
6230.81	16 044.8	4*	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3	0.2	58THE
6242.09	16 015.84	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.01	33HUM
6261.212	15 966.932	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	0.002	34MEG
6265.302	15 956.509	40*	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	1	0.002	34MEG
6265.302	15 956.509	40*	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.002	34MEG
6268.34	15 948.78	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[9/2]$	4	0.01	33HUM
6273.23	15 936.34	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.01	33HUM
6276.99	15 926.80	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.01	33HUM
6281.81	15 914.58	5h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	4	0.01	33HUM
6286.011	15 903.941	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	5	0.002	34MEG
6292.649	15 887.165	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	0.002	34MEG
6294.45	15 882.62	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.01	33HUM
6314.97	15 831.01	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.01	33HUM
6318.062	15 823.263	500	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	0.002	34MEG
6325.81	15 803.88	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.01	33HUM
6331.50	15 789.68	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.01	33HUM
6333.97	15 783.52	40hl	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	3	0.01	33HUM
6337.58	15 774.53	8hl	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2	0.01	33HUM
6344.98	15 756.13	2h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[9/2]$	4	0.01	33HUM
6355.77	15 729.39	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.01	33HUM
6383.24	15 661.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	3	0.13	98AHM
6407.05	15 603.5		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})19f$	$^2[5/2]$	2	0.13	98AHM
6412.38	15 590.52	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.01	33HUM
6418.41	15 575.88	30	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.01	33HUM
6418.98	15 574.49	30h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.01	33HUM
6421.33	15 568.8		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})18f$	$^2[5/2]$	2	0.13	98AHM
6430.155	15 547.427	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.002	34MEG
6435.01	15 535.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	3	0.13	98AHM
6438.32	15 527.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})17f$	$^2[5/2]$	2	0.13	98AHM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
6438.90	15 526.3		$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	2	0.13	98AHM
6448.70	15 502.72	2h*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	3	0.01	33HUM
6448.70	15 502.72	2h*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4	0.01	33HUM
6450.48	15 498.44	7	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.01	33HUM
6451.79	15 495.29	10hl	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	4	0.01	33HUM
6458.71	15 478.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})16f$	$^2[5/2]$	2	0.13	98AHM
6461.50	15 472.01	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.01	33HUM
6469.705	15 452.385	300	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.002	34MEG
6472.841	15 444.899	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.002	34MEG
6483.63	15 419.2		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})15f$	$^2[5/2]$	2	0.13	98AHM
6487.765	15 409.371	120	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.002	34MEG
6497.43	15 386.45	30hl	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4	0.01	33HUM
6498.717	15 383.402	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.002	34MEG
6500.37	15 379.49	15*	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.01	33HUM
6500.37	15 379.49	15*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.01	33HUM
6504.18	15 370.48	200h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	5	0.01	33HUM
6504.38	15 370.0		$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0	0.13	98AHM
6507.50	15 362.64	3E2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.01	33HUM
6521.508	15 329.641	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.002	34MEG
6533.159	15 302.303	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.002	34MEG
6543.360	15 278.447	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.002	34MEG
6546.12	15 272.01	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.01	33HUM
6552.60	15 256.9		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})13f$	$^2[7/2]$	3	0.13	98AHM
6552.99	15 256.0		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})13f$	$^2[5/2]$	2	0.13	98AHM
6553.66	15 254.44	4	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.01	33HUM
6554.196	15 253.188	50hl	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.002	34MEG
6558.62	15 242.9		$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.13	98AHM
6559.97	15 239.76	25	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.01	33HUM
6560.65	15 238.18	4h	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.01	33HUM
6568.39	15 220.2	30	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.2	58THE
6583.27	15 185.83	20	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.01	33HUM
6590.86	15 168.34	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0	0.01	33HUM
6593.27	15 162.8		$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1	0.13	98AHM
6595.561	15 157.526	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	0.002	34MEG
6599.71	15 148.0		$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.13	98AHM
6601.58	15 143.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12f$	$^2[7/2]$	3	0.13	98AHM
6602.06	15 142.6		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12f$	$^2[5/2]$	2	0.13	98AHM
6602.87	15 140.75	4h*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	4	0.01	33HUM
6602.87	15 140.75	4h*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	3	0.01	33HUM
6604.46	15 137.1		$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	2	0.13	98AHM
6604.98	15 135.9		$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	3	0.13	98AHM
6607.41	15 130.34	30h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	4	0.01	33HUM
6608.87	15 127.00	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.01	33HUM
6621.08	15 099.1		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})19f$	$^2[5/2]$	2	0.13	98AHM
6630.44	15 077.79	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	0.01	33HUM
6632.464	15 073.190	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.002	34MEG
6636.38	15 064.3		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})18f$	$^2[5/2]$	2	0.13	98AHM
6648.75	15 036.27	3	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.01	33HUM
6654.67	15 022.9		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})17f$	$^2[5/2]$	2	0.13	98AHM
6657.92	15 015.56	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.01	33HUM
6664.85	14 999.95	4	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	0.01	33HUM
6665.67	14 998.1		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[7/2]$	3	0.13	98AHM
6666.29	14 996.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[5/2]$	2	0.13	98AHM
6666.965	14 995.188	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.002	34MEG
6668.920	14 990.792	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0	0.002	34MEG
6676.53	14 973.7		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})16f$	$^2[5/2]$	2	0.13	98AHM
6678.972	14 968.231	25	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.002	34MEG
6681.036	14 963.607	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.002	34MEG
6684.79	14 955.2	30*	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	3	0.2	58THE
6684.79	14 955.2	30*	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	2	0.2	58THE
6703.26	14 914.0		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})15f$	$^2[5/2]$	2	0.13	98AHM
6703.62	14 913.2		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})15f$	$^2[3/2]$	2	0.13	98AHM
6705.46	14 909.1		$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	2	0.13	98AHM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
6706.46	14 906.88	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.01	33HUM
6708.25	14 902.9	3*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4	0.2	58THE
6708.25	14 902.9	3*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	0.2	58THE
6708.25	14 902.9	3*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.2	58THE
6712.93	14 892.5	3*	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	2	0.2	58THE
6712.93	14 892.5	3*	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	3	0.2	58THE
6712.93	14 892.5	3*	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	3	0.2	58THE
6719.39	14 878.2		$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[5/2]$	2	0.13	98AHM
6721.38	14 873.8		$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	0.13	98AHM
6728.008	14 859.138	200	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.002	34MEG
6728.57	14 857.9	f	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.13	98AHM
6736.14	14 841.2		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})14f$	$^2[5/2]$	2	0.13	98AHM
6736.50	14 840.4		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})14f$	$^2[3/2]$	2	0.13	98AHM
6751.93	14 806.5		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[7/2]$	3	0.13	98AHM
6752.79	14 804.6		$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	2	0.13	98AHM
6767.12	14 773.26	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.01	33HUM
6777.57	14 750.48	50	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.01	33HUM
6778.60	14 748.24	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.01	33HUM
6808.12	14 684.3	5	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	0.2	58THE
6815.64	14 668.09	12	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.01	33HUM
6818.38	14 662.19	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.01	33HUM
6827.315	14 643.006	200	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.002	34MEG
6840.96	14 613.80	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.01	33HUM
6841.50	14 612.65	20*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4	0.01	33HUM
6841.50	14 612.65	20*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3	0.01	33HUM
6844.27	14 606.73	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.01	33HUM
6844.84	14 605.52	2h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.01	33HUM
6846.613	14 601.733	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.002	34MEG
6848.82	14 597.03	50	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4	0.01	33HUM
6850.13	14 594.24	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.01	33HUM
6860.19	14 572.83	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.01	33HUM
6863.20	14 566.44	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.01	33HUM
6865.58	14 561.39	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.01	33HUM
6866.838	14 558.726	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.002	34MEG
6872.107	14 547.564	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	5	0.002	34MEG
6882.155	14 526.325	300	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.002	34MEG
6910.82	14 466.07	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.01	33HUM
6922.22	14 442.25	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.01	33HUM
6924.67	14 437.14	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.01	33HUM
6925.53	14 435.35	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.01	33HUM
6935.62	14 414.35	50	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.01	33HUM
6936.69	14 412.12	8	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.01	33HUM
6949.76	14 385.02	1E2	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.01	33HUM
6961.10	14 361.6	20	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	4	0.2	58THE
6976.182	14 330.536	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.002	34MEG
6982.05	14 318.49	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.01	33HUM
6991.65	14 298.83	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.01	33HUM
7003.10	14 275.45	4	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.01	33HUM
7019.02	14 243.08	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.01	33HUM
7034.80	14 211.13	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	0.01	33HUM
7035.53	14 209.65	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.01	33HUM
7047.37	14 185.78	30*	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.01	33HUM
7047.37	14 185.78	30*	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	3	0.01	33HUM
7049.07	14 182.36	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.01	33HUM
7049.36	14 181.77	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	2	0.01	33HUM
7051.06	14 178.36	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.01	33HUM
7072.44	14 135.5	30	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3	0.2	58THE
7078.46	14 123.473	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.01	33HUM
7119.598	14 041.866	500	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4	0.002	34MEG
7136.57	14 008.472	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.01	33HUM
7172.70	13 937.910	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	0.01	33HUM
7192.42	13 899.7	4	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})11s$	$^2[1/2]^\circ$	1	0.2	58THE
7200.79	13 883.539	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.01	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
7209.14	13 867.458	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.01	33HUM
7220.24	13 846.139	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.01	33HUM
7222.64	13 841.5	20	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.2	58THE
7238.20	13 811.783	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	0.01	33HUM
7244.94	13 798.934	20*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.01	33HUM
7244.94	13 798.934	20*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.01	33HUM
7249.92	13 789.456	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.01	33HUM
7250.87	13 787.649	5h	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.01	33HUM
7257.94	13 774.218	60	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	0.01	33HUM
7262.54	13 765.494	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.01	33HUM
7266.49	13 758.011	25	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.01	33HUM
7283.961	13 725.012	40	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.002	34MEG
7285.301	13 722.488	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.002	34MEG
7307.37	13 681.045	5h	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	4	0.01	33HUM
7313.01	13 670.494	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	4	0.01	33HUM
7316.272	13 664.398	70	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.002	34MEG
7316.87	13 663.282	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.01	33HUM
7319.94	13 657.551	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3	0.01	33HUM
7321.452	13 654.731	80	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.002	34MEG
7323.05	13 651.751	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.01	33HUM
7336.480	13 626.761	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.002	34MEG
7355.58	13 591.377	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.01	33HUM
7382.57	13 541.7	30	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	4	0.2	58THE
7386.003	13 535.394	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.002	34MEG
7393.793	13 521.134	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.002	34MEG
7400.41	13 509.044	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.01	33HUM
7404.51	13 501.564	12	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.01	33HUM
7405.77	13 499.267	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.01	33HUM
7424.05	13 466.028	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.01	33HUM
7441.94	13 433.657	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.01	33HUM
7451.00	13 417.322	25	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.01	33HUM
7472.01	13 379.595	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.01	33HUM
7474.01	13 376.015	25	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.01	33HUM
7492.23	13 343.486	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.01	33HUM
7501.13	13 327.655	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.01	33HUM
7514.54	13 303.871	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0	0.01	33HUM
7514.96	13 303.128	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.01	33HUM
7559.79	13 224.240	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.01	33HUM
7570.93	13 204.781	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.01	33HUM
7584.29	13 181.521	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4	0.01	33HUM
7584.680	13 180.843	200	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5	0.002	34MEG
7589.61	13 172.281	6	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.01	33HUM
7594.36	13 164.042	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	0.01	33HUM
7600.77	13 152.941	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4	0.01	33HUM
7604.97	13 145.677	2h	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.01	33HUM
7608.46	13 139.647	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.01	33HUM
7609.82	13 137.299	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4	0.01	33HUM
7642.024	13 081.938	500hf	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.002	34MEG
7642.30	13 081.465		$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.01	33HUM
7643.91	13 078.710	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.01	33HUM
7664.02	13 044.392	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.01	33HUM
7664.56	13 043.473	30	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.01	33HUM
7666.61	13 039.985	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.01	33HUM
7670.81	13 032.846	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.01	33HUM
7740.31	12 915.825	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.01	33HUM
7762.15	12 879.5	4	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.2	58THE
7783.66	12 843.892	50	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.01	33HUM
7789.42	12 834.395	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.01	33HUM
7790.53	12 832.566	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.01	33HUM
7802.651	12 812.631	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.002	34MEG
7804.64	12 809.4	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.2	55THE
7825.55	12 775.1	30	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	0.2	58THE
7832.98	12 763.022	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.01	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
7841.23	12 749.593	15	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.01	33HUM
7881.320	12 684.740	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.002	34MEG
7887.393	12 674.974	300hf	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.002	34MEG
7937.41	12 595.103	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.01	33HUM
7954.22	12 568.486	4	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0	0.01	33HUM
7967.342	12 547.786	500hf	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.002	34MEG
7976.03	12 534.118	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.01	33HUM
8003.26	12 491.473	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.01	33HUM
8009.59	12 481.6	30	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.2	58THE
8029.67	12 450.388	100*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.01	33HUM
8029.67	12 450.388	100*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.01	33HUM
8040.56	12 433.525	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.01	33HUM
8042.18	12 431.021	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.01	33HUM
8057.258	12 407.758	200	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4	0.002	34MEG
8061.339	12 401.477	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.002	34MEG
8064.94	12 395.939	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.01	33HUM
8073.99	12 382.045	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.01	33HUM
8097.24	12 346.492	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.01	33HUM
8101.98	12 339.269	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.01	33HUM
8107.91	12 330.244	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.01	33HUM
8109.46	12 327.888	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.01	33HUM
8118.29	12 314.479	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	0.01	33HUM
8123.29	12 306.899	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.01	33HUM
8165.37	12 243.476	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.01	33HUM
8171.02	12 235.010	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.01	33HUM
8182.93	12 217.203	1-	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8f$	$^2[5/2]$	2	0.01	33HUM
8196.73	12 196.634	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.01	33HUM
8206.336	12 182.357	700	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.002	34MEG
8231.6336	12 144.9184	10 000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.0005	34MEG
8266.520	12 093.665	500	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.002	34MEG
8280.1162	12 073.8065	7000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	0.0005	34MEG
8297.71	12 048.206	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.01	33HUM
8323.90	12 010.298	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.01	33HUM
8324.58	12 009.317	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.01	33HUM
8346.8217	11 977.3164	2000	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.0005	34MEG
8347.45	11 976.415	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.01	33HUM
8349.05	11 974.120	40	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.01	33HUM
8371.38	11 942.180	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	0.01	33HUM
8372.79	11 940.169	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.01	33HUM
8392.37	11 912.312	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.01	33HUM
8402.03	11 898.616	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.01	33HUM
8409.1894	11 888.4857	2000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.0005	34MEG
8437.55	11 848.526	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.01	33HUM
8450.37	11 830.551	1h	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.01	33HUM
8469.55	11 803.8	10	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	0.2	58THE
8501.02	11 760.063	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.01	33HUM
8522.55	11 730.355	30	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.01	33HUM
8530.10	11 719.972	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.01	33HUM
8553.97	11 687.267	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.01	33HUM
8559.36	11 679.9	4	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.2	55THE
8564.7	11 672.6	1-	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.1	33HUM
8576.01	11 657.232	200	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.01	33HUM
8624.24	11 592.040	80	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.01	33HUM
8648.54	11 559.470	250	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.01	33HUM
8692.20	11 501.408	100	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.01	33HUM
8696.86	11 495.246	200	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.01	33HUM
8709.64	11 478.378	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.01	33HUM
8711.54	11 475.875	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.01	33HUM
8739.372	11 439.328	300	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.002	34MEG
8758.20	11 414.736	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.01	33HUM
8819.4106	11 335.5135	5000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	0.0005	34MEG
8851.44	11 294.495	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	0.01	33HUM
8862.32	11 280.630	300	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.01	33HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
8885.71	11 250.936	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.01	33HUM
8908.73	11 221.863	200	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	0.01	33HUM
8930.83	11 194.094	200	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.01	33HUM
8952.2509	11 167.3092	1000hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.0005	34MEG
8952.78	11 166.649	50	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.01	33HUM
8981.05	11 131.500	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.01	33HUM
8987.57	11 123.424	200	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.01	33HUM
9025.98	11 076.09	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.02	33HUM
9032.18	11 068.49	50	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.02	33HUM
9045.4466	11 052.2523	400hf	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.0005	34MEG
9096.13	10 990.67	50	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.02	33HUM
9112.24	10 971.24	4	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.02	33HUM
9131.59	10 947.99	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4	0.02	33HUM
9141.8	10 935.76	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.1	33HUM
9152.12	10 923.43	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.02	33HUM
9162.6520	10 910.8763	500	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.0005	34MEG
9167.52	10 905.08	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.02	33HUM
9197.18	10 869.91	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.02	33HUM
9203.20	10 862.80	30	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.02	33HUM
9211.38	10 853.16	25	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.02	33HUM
9216.51	10 847.12	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.02	33HUM
9222.39	10 840.20	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.02	33HUM
9245.18	10 813.48	3	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.02	33HUM
9301.95	10 747.48	30	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	0.02	33HUM
9306.64	10 742.07	40	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.02	33HUM
9334.08	10 710.49	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.02	33HUM
9374.02	10 664.86	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	0.02	33HUM
9374.76	10 664.01	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	0.02	33HUM
9412.01	10 621.81	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.02	33HUM
9441.46	10 588.68	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.02	33HUM
9442.68	10 587.31	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.02	33HUM
9445.34	10 584.33	80	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.02	33HUM
9497.07	10 526.68	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.02	33HUM
9505.78	10 517.03	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.02	33HUM
9513.377	10 508.632	200	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	0.002	34MEG
9585.14	10 429.95	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.02	33HUM
9605.80	10 407.52	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.02	33HUM
9616.95	10 395.46	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.02	33HUM
9668.94	10 339.56	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	0.02	33HUM
9685.32	10 322.07	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.02	33HUM
9700.99	10 305.40	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.02	33HUM
9710.03	10 295.81	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.02	33HUM
9718.16	10 287.19	100	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.02	33HUM
9799.697	10 201.600	2000	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.002	34MEG
9923.198	10 074.634	3000	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.002	34MEG
9966.58	10 030.78	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.02	33HUM
10 023.72	9 973.602	50*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	0.02	33HUM
10 023.72	9 973.602	50*	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	0.02	33HUM
10 056.84	9 940.756	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.02	33HUM
10 057.96	9 939.649	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.02	33HUM
10 060.96	9 936.685	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.02	33HUM
10 084.79	9 913.205	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.02	33HUM
10 107.34	9 891.089	80	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	0.02	33HUM
10 119.8	9 878.91	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.1	33HUM
10 125.47	9 873.378	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.02	33HUM
10 188.36	9 812.433	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.02	33HUM
10 251.07	9 752.406	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.02	33HUM
10 323.9	9 683.61	20	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.2	58THE
10 420.52	9 593.821	1	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.02	33HUM
10 484.83	9 534.976	8	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	0.02	33HUM
10 507.91	9 514.033	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.02	33HUM
10 515.15	9 507.483	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.02	33HUM
10 527.857	9 496.007	900	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.003	00MIS
10 549.76	9 476.29	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.03	35MEG

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
10 706.78	9337.32	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.03	35MEG
10 758.86	9292.12	100	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.03	35MEG
10 838.34	9223.98	1000	$5p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.03	35MEG
10 895.324	9175.736	870	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.004	00MIS
11 085.237	9018.537	1900	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	0.004	00MIS
11 127.189	8984.535	375	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.004	00MIS
11 130.81	8981.61	8	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.03	35MEG
11 141.145	8973.281	120	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.004	00MIS
11 162.67	8955.98	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.03	35MEG
11 175.5	8945.70	1	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	0.1	35MEG
11 214.89	8914.28	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.03	35MEG
11 289.10	8855.68	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.03	35MEG
11 309.56	8839.66	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.03	35MEG
11 415.04	8757.97	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.03	35MEG
11 491.22	8699.91	15	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.03	35MEG
11 537.4	8665.09	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0	0.1	35MEG
11 614.08	8607.88	25	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.03	35MEG
11 742.236	8513.935	1750	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	0.004	00MIS
11 793.56	8476.88	10	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.03	35MEG
11 857.31	8431.31	6	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	0.03	35MEG
11 857.86	8430.92	2	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.03	35MEG
11 874.36	8419.20	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.03	35MEG
11 912.10	8392.53	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.03	35MEG
11 951.1	8365.14	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.1	35MEG
11 953.00	8363.81	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.03	35MEG
12 084.80	8272.59	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	0.03	35MEG
12 203.54	8192.1	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.5	49SIT
12 235.24	8170.88	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.03	35MEG
12 257.81	8155.832	1	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.03	35MEG
12 272.88	8145.8	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	0.5	49SIT
12 409.1	8056.4	20:	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1		73HUM
12 451.21	8029.15	2	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.1	52HUM
12 590.00	7940.64	26	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.1	52HUM
12 623.40	7919.629	5	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.03	35MEG
13 331.9	7498.8	75:	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3		73HUM
13 470.8	7421.5	5:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1		73HUM
13 543.16	7381.78	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.1	52HUM
13 656.48	7320.53	150	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.1	52HUM
13 814.4	7236.8	10:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2		73HUM
13 919.6	7182.1	15:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2		73HUM
14 050.7	7115.1	5:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0		73HUM
14 128.1	7076.2	50:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3		73HUM
14 142.09	7069.16	80	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.1	52HUM
14 215.6	7032.6	?:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2		73HUM
14 241.39	7019.87	40	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.1	52HUM
14 354.6	6964.5	4:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1		60HUM
14 364.90	6959.51	20	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.1	52HUM
14 384.78	6949.9	3	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.5	49SIT
14 424.2	6930.9	15:*	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3		73HUM
14 424.2	6930.9	15:*	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	4		73HUM
14 424.2	6930.9	15:*	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2		73HUM
14 503.4	6893.0	10:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1		73HUM
14 659.84	6819.49	5	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.1	52HUM
14 732.38	6785.91	200	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.1	52HUM
14 742.3	6781.3	25:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2		73HUM
14 811.5	6749.6	10:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3		73HUM
14 850.0	6732.2	20:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2		73HUM
15 060.1	6638.2	10:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1		73HUM
15 099.7	6620.8	100:	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1		73HUM
15 277.7	6543.7	4:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3		60HUM
15 291.8	6537.7	5:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2		73HUM
15 328.9	6521.9	4:	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1		60HUM
15 418.01	6484.15	110	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.1	52HUM
15 491.0	6453.6	45:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1		73HUM

Spectral lines of Xe I—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
15 518.3	6442.2	10:	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0		73HUM
15 557.1	6426.2	150:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2		73HUM
15 722.6	6358.5	5:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2		73HUM
15 866.5	6300.9	5:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1		73HUM
15 979.5	6256.3	250:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2		73HUM
16 039.9	6232.7	100:	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2		73HUM
16 052.02	6228.04	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.1	52HUM
16 554.5	6039.0	125:	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3		73HUM
16 665.1	5999.0	2:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1		60HUM
16 728.158	5976.312	5000	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.008	00MIS
16 745.721	5970.044	46	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.008	00MIS
16 834.5	5938.5	15:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3		73HUM
16 883.078	5921.473	38	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.009	00MIS
17 140.6	5832.5	5:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	5		73HUM
17 325.798	5770.164	1650	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.009	00MIS
17 365.117	5757.099	22	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	0.009	00MIS
17 482.971	5718.290	42	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.009	00MIS
17 661.030	5660.638	9	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.009	00MIS
18 272.880	5471.097	8	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.010	00MIS
18 481.190	5409.430	19	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.010	00MIS
18 788.146	5321.052	860	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.011	00MIS
18 791.65	5320.06	3	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	3	0.5	49SIT
19 466.68	5135.58	4	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.5	49SIT

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
20 192.711	4952.282	80	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.012	00MIS
20 267.774	4933.941	2300	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.012	00MIS
20 287.972	4929.029	10	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.012	00MIS
20 599.091	4854.583	11	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.013	00MIS
20 848.409	4796.529	7	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.013	00MIS
20 857.615	4794.412	6	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.013	00MIS
21 378.892	4677.511	26	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.014	00MIS
21 475.961	4656.369	140	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.014	00MIS
22 275.9	4489.2	60:	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1		73HUM
22 392.5	4465.8	40:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5		73HUM
22 412.9	4461.7	75:	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2		73HUM
22 624.5	4420.0	90:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0		73HUM
22 748.1	4396.0	5:*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4		73HUM
22 748.1	4396.0	5:*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3		73HUM
22 971.1	4353.3	40:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4		73HUM
23 028.7	4342.4	10:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2		73HUM
23 079.8	4332.8	45:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0		73HUM
23 111.6	4326.8	8:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2		73HUM
23 198.	4310.72	10	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.8	61HEP
23 259.1	4299.4	35:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2		73HUM
23 285.9	4294.4	110:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3		73HUM
23 450.0	4264.4	35:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3		73HUM
23 803.0	4201.2	60:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1		73HUM
23 941.1	4176.9	30:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3		73HUM
24 450.3	4089.9	70:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1		73HUM
24 709.0	4047.1	60:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3		73HUM
24 783.0	4035.0	30:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2		73HUM
24 832.2	4027.03	20	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.8	61HEP
25 152.8	3975.7	175:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4		73HUM
25 166.3	3973.6	60:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2		73HUM
25 419.7	3934.0	45:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2		73HUM
25 827.9	3871.8	30:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1		73HUM

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
26 027.8	3842.0	50:	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1		73HUM
26 050.6	3838.7	10:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1		73HUM
26 275.9	3805.77	60	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.8	61HEP
26 478.8	3776.6	8:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1		73HUM
26 517.7	3771.07	30	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.8	61HEP
26 608.3	3758.2	8:	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1		73HUM
27 304.8	3662.4	30:*	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2		73HUM
27 304.8	3662.4	30:*	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1		73HUM
27 750.8	3603.5	15:	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1		73HUM
28 096.4	3559.2	15:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2		73HUM
28 123.2	3555.8	50:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1		73HUM
28 389.3	3522.5	250:	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2		73HUM
28 466.6	3512.9	8:	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2		73HUM
28 590.0	3497.7	750:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2		73HUM
28 704.5	3483.8	15:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3		73HUM
29 029.1	3444.8	8:	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1		73HUM
29 054.7	3441.8	75:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1		73HUM
29 392.4	3402.2	300:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0		73HUM
29 456.1	3394.9	150:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3		73HUM
29 553.2	3383.7	20:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1		73HUM
29 657.7	3371.8	100:	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2		73HUM
29 821.7	3353.3	100:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3		73HUM
29 993.2	3334.1	75:	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2		73HUM
30 030.1	3330.0	12:	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3		73HUM
30 261.4	3304.5	600:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1		73HUM
30 431.9	3286.0	60:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1		73HUM
30 483.7	3280.4	1500:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3		73HUM
30 512.4	3277.4	100:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3		73HUM
30 802.6	3246.5	500:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2		73HUM
30 863.6	3240.1	15:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3		73HUM
31 077.7	3217.7	6000:	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3		73HUM
31 284.5	3196.5	80:	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2		73HUM
31 344.5	3190.3	125:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1		73HUM
31 616.5	3162.9	550:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2		73HUM
32 301.9	3095.8	100:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2		73HUM
32 364.4	3089.8	70:	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1		73HUM
32 590.8	3068.3	12:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2		73HUM
32 748.2	3053.6	1800:	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2		73HUM
32 751.8	3053.3	*	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	3	64AGO
32 751.8	3053.3	*	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	3	64AGO
33 274.6	3005.3	75:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1		73HUM
33 536.1	2981.9	22:	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3		73HUM
33 576.7	2978.3	50:*	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2		73HUM
33 576.7	2978.3	50:*	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2		73HUM
33 675.9	2969.5	3500:	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2		73HUM
34 023.9	2939.1	150:	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1		73HUM
34 084.1	2933.9	90:	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0		73HUM
34 340.0	2912.1		$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	10	64FAU
34 753.5	2877.4	170:	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2		73HUM
35 038.3	2854.0	75:	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1		73HUM
35 079.9	2850.6	5000:	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3		73HUM
35 092.9	2849.6	?:*	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1		73HUM
35 092.9	2849.6	?:*	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4		73HUM
35 256.5	2836.4	110:	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2		73HUM
35 701.6	2801.0	30:	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2		73HUM
36 054.9	2773.5	20:	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2		73HUM
36 219.1	2761.0	250:	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2		73HUM
36 241.6	2759.3	150:	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1		73HUM
36 518.5	2738.34	100	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	1	72MOR
36 624.7	2730.4	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	4	72MOR
36 798.8	2717.48	250	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	1	72MOR
36 858.8	2713.1	17*	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	3	72MOR
36 858.8	2713.1	17*	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})15p$	$^2[5/2]$	3	3	72MOR
37 218.8	2686.8	1*	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2	4	72MOR

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
37 218.8	2686.8	1*	$5p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	4	72MOR
37 264.8	2683.5	2	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	4	72MOR
38 508.2	2596.8	1	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	4	72MOR
38 678.89	2585.39	22	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	5	1	67HUM
38 690.73	2584.60	18	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	4	1	67HUM
38 696.845	2584.19	200	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	1	67HUM
38 737.73	2581.46	150	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	1	67HUM
38 748.607	2580.74	250	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	1	67HUM
38 878.77	2572.10	350	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	1	67HUM
38 950.396	2567.37	25 000	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	1	67HUM
38 959.66	2566.76	1400	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	6	1	67HUM
38 973.07	2565.87	1100	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	5	1	67HUM
39 165.126	2553.29	28	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	1	67HUM
39 209.7	2550.39	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	2	63HUM
39 263.8	2546.9	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	1	4	72MOR
39 295.4	2544.8	2	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	4	72MOR
39 299.5	2544.6	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})14p$	$^2[5/2]$	3	4	72MOR
39 334.1	2542.3	2*	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	4	72MOR
39 334.1	2542.3	2*	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	4	72MOR
39 483.93	2532.68	400	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4	1	67HUM
39 529.86	2529.73	200	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3	1	67HUM
39 635.1	2523.0	2	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0	4	72MOR
39 770.11	2514.45	7	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	1	67HUM
39 816.6	2511.5	1	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	4	72MOR
39 821.85	2511.18	4	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	1	67HUM
39 906.6	2505.9	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[7/2]$	3	4	72MOR
39 965.646	2502.15	2500	$5p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	1	67HUM
39 967.00	2502.06	1200*	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	4	1	67HUM
39 967.00	2502.06	1200*	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	5	1	67HUM
40 050.5	2496.8	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	2	4	72MOR
40 050.5	2496.8	1*	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	3	4	72MOR
40 070.69	2495.59	30*	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3	1	67HUM
40 070.69	2495.59	30*	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4	1	67HUM
40 207.116	2487.12	33	$5p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	1	67HUM
40 549.3	2466.1	2	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	4	72MOR
40 672.6	2458.7	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3	4	72MOR
40 769.003	2452.84	18	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	1	67HUM
41 198.4	2427.3	0	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	4	72MOR
41 230.1	2425.4	3	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	4	72MOR
41 526.0	2408.13	30	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	3	72MOR
41 780.5	2393.5	1	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[1/2]^\circ$	1	4	72MOR
41 831.3	2390.55	20	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	2	3	72MOR
42 183.6	2370.6	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1	4	72MOR
42 232.1	2367.87	30*	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[7/2]^\circ$	3	3	72MOR
42 232.1	2367.87	30*	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[7/2]^\circ$	3	3	72MOR
42 367.3	2360.3	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	4	72MOR
42 575.0	2348.80	15	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	3	72MOR
42 820.9	2335.31	30	$5p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	3	72MOR
43 009.9	2325.0	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	4	72MOR
43 424.2	2302.9	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	4	72MOR
43 460.8	2300.9	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	4	72MOR
43 484.6	2299.66	25	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	3	72MOR
43 668.0	2290.0	6	$5p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	4	72MOR
44 086.8	2268.3	1*	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	4	72MOR
44 086.8	2268.3	1*	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	4	72MOR
44 524.5	2246.0	9	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	4	72MOR
44 732.4	2235.52	3*	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	4	72MOR
44 732.4	2235.52	3*	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	4	72MOR
44 784.6	2232.91	2	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})11f$	$^2[3/2]$	2	4	72MOR
45 132.0	2215.72	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})19d$	$^2[3/2]^\circ$	2	4	72MOR
45 194.6	2212.65	1	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})11p$	$^2[1/2]$	1	4	72MOR
45 251.3	2209.88	1	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	4	72MOR
45 393.2	2202.97	50	$5p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	2	72MOR
45 422.0	2201.58	2	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	4	72MOR

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
45 482.5	2198.65	30	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	3	72MOR
45 706.0	2187.90	7	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	4	72MOR
45 731.8	2186.66	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	4	4	72MOR
45 802.9	2183.27	1*	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})18d$	$^2[7/2]^\circ$	3	4	72MOR
45 802.9	2183.27	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	3	4	72MOR
45 802.9	2183.27	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4	4	72MOR
45 887.9	2179.22	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	2	4	72MOR
45 938.5	2176.82	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	1	4	72MOR
46 022.9	2172.83	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	4	72MOR
46 108.7	2168.79	1	$5p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	4	72MOR
46 209.3	2164.07	2	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	4	72MOR
46 229.5	2163.12	1	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	4	72MOR
46 252.7	2162.04	1*	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})18d$	$^2[3/2]^\circ$	2	4	72MOR
46 252.7	2162.04	1*	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3	4	72MOR
46 301.5	2159.76	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2	4	72MOR
46 396.8	2155.32	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	1	4	72MOR
46 396.8	2155.32	1*	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	4	72MOR
46 418.1	2154.33	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	4	72MOR
46 598.4	2146.00	2	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	4	72MOR
46 706.5	2141.03	8	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	4	72MOR
46 739.7	2139.51	1*	$5p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	4	72MOR
46 739.7	2139.51	1*	$5p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	6	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	5	4	72MOR
46 751.9	2138.95	1*	$5p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	4	72MOR
46 751.9	2138.95	1*	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})17f$	$^2[3/2]$	2	4	72MOR
46 810.8	2136.26	1	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	4	72MOR
46 830.6	2135.36	1	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	4	72MOR
46 918.8	2131.34	2	$5p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	4	72MOR
46 957.4	2129.59	1	$5p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1	4	72MOR
47 053.2	2125.25	1*	$5p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1	4	72MOR
47 053.2	2125.25	1*	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	4	72MOR
47 086.7	2123.74	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	4	72MOR
47 108.0	2122.78	2	$5p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	4	72MOR
47 122.8	2122.11	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})17d$	$^2[5/2]^\circ$	2	4	72MOR
47 191.1	2119.04	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})17d$	$^2[7/2]^\circ$	3	4	72MOR
47 212.7	2118.07	6*	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	4	72MOR
47 212.7	2118.07	6*	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	4	72MOR
47 262.8	2115.83	2	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})15f$	$^2[5/2]$	2	4	72MOR
47 341.0	2112.33	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	4	72MOR
47 358.0	2111.58	1	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3	4	72MOR
47 406.8	2109.40	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	0	4	72MOR
47 451.3	2107.42	1	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	2	4	72MOR
47 501.8	2105.18	2	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	4	72MOR
47 544.7	2103.28	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4	4	72MOR
47 586.9	2101.42	2	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	4	72MOR
47 630.2	2099.51	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	3	4	72MOR
47 630.2	2099.51	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	4	72MOR
47 677.3	2097.43	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2	4	72MOR
47 677.3	2097.43	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	4	4	72MOR
47 707.2	2096.12	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	0	4	72MOR
47 707.2	2096.12	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2	4	72MOR
47 707.2	2096.12	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	4	4	72MOR
47 735.3	2094.89	1	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	4	72MOR
47 768.2	2093.44	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})9f$	$^2[3/2]$	2	4	72MOR
47 785.2	2092.70	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})18s$	$^2[3/2]^\circ$	1	4	72MOR
47 796.6	2092.20	1	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	3	4	72MOR
47 842.2	2090.20	3	$5p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	4	72MOR
47 862.0	2089.34	2	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	0	–	$5p^5(^2P^\circ_{3/2})14f$	$^2[3/2]$	1	4	72MOR
47 868.4	2089.06	1*	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})16f$	$^2[3/2]$	1	4	72MOR
47 868.4	2089.06	1*	$5p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})17d$	$^2[5/2]^\circ$	2	4	72MOR
47 942.3	2085.84	2	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[5/2]^\circ$	2	4	72MOR
47 952.9	2085.38	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})16d$	$^2[5/2]^\circ$	2	4	72MOR
48 047.3	2081.28	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	4	72MOR
48 088.9	2079.48	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	4	72MOR
48 107.6	2078.67	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3	4	72MOR

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
48 107.6	2078.67	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3	4	72MOR
48 107.6	2078.67	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	1	4	72MOR
48 142.3	2077.18	1*	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})14p$	$^2[3/2]$	2	4	72MOR
48 142.3	2077.18	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	4	72MOR
48 191.4	2075.06	1	$5p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	4	72MOR
48 240.9	2072.93	2	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	3	4	72MOR
48 336.0	2068.85	2	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	4	72MOR
48 374.3	2067.21	1	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})14p$	$^2[5/2]$	2	4	72MOR
48 436.7	2064.55	1	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	4	72MOR
48 488.6	2062.34	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	4	72MOR
48 536.0	2060.33	1	$5p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	4	72MOR
48 637.2	2056.04	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	4	72MOR
48 643.9	2055.76	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	4	72MOR
48 739.2	2051.74	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[1/2]$	1	4	72MOR
48 868.4	2046.31	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	4	72MOR
48 899.6	2045.01	1*	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})16d$	$^2[5/2]^\circ$	3	4	72MOR
48 899.6	2045.01	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	2	4	72MOR
48 949.5	2042.92	2	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})14f$	$^2[5/2]$	2	4	72MOR
48 979.6	2041.67	1	$5p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})14f$	$^2[3/2]$	2	4	72MOR
49 028.2	2039.64	1*	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})14p$	$^2[5/2]$	2	4	72MOR
49 028.2	2039.64	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	2	4	72MOR
49 028.2	2039.64	1*	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})16d$	$^2[7/2]^\circ$	3	4	72MOR
49 052.1	2038.65	2	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	4	72MOR
49 088.7	2037.13	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})16d$	$^2[7/2]^\circ$	4	4	72MOR
49 110.2	2036.24	1*	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	4	72MOR
49 110.2	2036.24	1*	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	4	72MOR
49 201.4	2032.46	8	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	4	72MOR
49 274.5	2029.45	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	–	$5p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	4	72MOR
49 322.9	2027.46	13*	$5p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	3	72MOR
49 322.9	2027.46	13*	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	2	3	72MOR
49 379.6	2025.13	1	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	4	72MOR
49 480.5	2021.00	1*	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	4	72MOR
49 480.5	2021.00	1*	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	4	72MOR
49 669.7	2013.30	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	4	72MOR
49 681.6	2012.82	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	4	72MOR
49 723.8	2011.11	1	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	4	72MOR
49 787.4	2008.54	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	3	4	72MOR
49 838.8	2006.47	1	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	4	72MOR
49 922.0	2003.12	2*	$5p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	4	72MOR
49 922.0	2003.12	2*	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})17s$	$^2[3/2]^\circ$	1	4	72MOR
50 021.7	1999.13	2	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	4	72MOR
50 122.2	1995.12	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	4	72MOR
50 243.8	1990.30	1	$5p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	4	72MOR
50 328.5	1986.95	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[5/2]^\circ$	2	4	72MOR
50 413.2	1983.61	1	$5p^5(^2P^\circ_{3/2})16s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1	4	72MOR
50 647.9	1974.42	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	4	72MOR
50 674.7	1973.37	2*	$5p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	2	4	72MOR
50 674.7	1973.37	2*	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[3/2]$	2	4	72MOR
50 674.7	1973.37	2*	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	4	72MOR
50 674.7	1973.37	2*	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})18p$	$^2[5/2]$	2	4	72MOR
50 756.7	1970.18	1	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	2	4	72MOR
50 779.3	1969.31	1	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[5/2]$	3	4	72MOR
50 883.8	1965.26	1	$5p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})10f$	$^2[3/2]$	2	4	72MOR
50 984.2	1961.39	2	$5p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	4	72MOR
51 039.8	1959.26	1*	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	3	4	72MOR
51 039.8	1959.26	1*	$5p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	1	4	72MOR
51 140.3	1955.41	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[7/2]^\circ$	3	4	72MOR
51 176.6	1954.02	3	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	4	72MOR
51 308.4	1949.00	40	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	3	72MOR
51 521.2	1940.95	1	$5p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})15d$	$^2[7/2]^\circ$	3	4	72MOR
51 665.5	1935.53	1	$5p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	–	$5p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	4	72MOR
51 721.3	1933.44	1	$5p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	4	72MOR
52 035.2	1921.78	1	$5p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})12p$	$^2[5/2]$	2	4	72MOR
52 105.0	1919.20	6*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	4	72MOR

Spectral lines of Xe I—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
52 105.0	1919.20	6*	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	4	72MOR
52 115.4	1918.82	1*	$5p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	4	72MOR
52 115.4	1918.82	1*	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	–	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	4	72MOR
52 225.9	1914.76	1	$5p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	–	$5p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	4	72MOR
52 315.0	1911.50	1	$5p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	–	$5p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	4	72MOR
52 999.2	1886.82	1	$5p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	–	$5p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	3	4	72MOR
53 129.2	1882.20	1	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	4	72MOR
54 447.2	1836.64	4	$5p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	–	$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	4	72MOR
112 970.	885.19		$5p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	10	64FAU
185 140.	540.13		$5p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$5p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	10	64FAU

4.2. Xe II

I isoelectronic sequence

Ground state

$1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10} 5s^2 5p^5\ ^2P^\circ_{3/2}$

Ionization energy 169 175±30 cm^{-1} (20.975 0±0.003 7 eV) [87HAN]

A thorough analysis of the spectrum of singly ionized xenon, Xe II, was published in 1987 by Hansen and Persson [87HAN]. Using lines from the earlier published work of Boyce [36BOY] and Humphreys [39HUM] and Humphreys's unpublished compilation [81HUM] which included later work by him and by Boyce, they obtained a set of energy levels which we use here and a line compilation. Due to disagreements with the earlier work and with privately communicated interferometric data by D. A. Jackson, neither Hansen and Persson nor we chose to utilize the interferometric measurements made by Humphreys and Paul [70HUM] on ^{136}Xe II. Hansen and Persson [87HAN] concluded that the measurements by Humphreys and Paul and/or that by Jackson had incorrect interference order determinations which made their results unreliable.

In this compilation we use the energy levels determined by Hansen and Persson [87HAN]. In compiling our Xe II line list we used as source material their compilation which provided the Humphreys and Boyce lists from [36BOY], [39HUM], and [81HUM] but does not include [70HUM]. In addition we included lines from several works by Gallardo and co-workers who studied xenon in energetic excitation in laser tube type sources [81GAL], [82REY], [83BER], [93GAL]. Only lines unambiguously assigned to Xe II in these papers were considered. We also considered lines observed by Zielińska *et al.* [02ZIE]. The sources of the Xe II lines are summarized in Table 4. The priority for inclusion of duplicate lines was first [87HAN] then [93GAL] then [02ZIE] and then [83BER], [82REY], and [81GAL]. All candidate lines were passed through a program to determine if they correspond to a transition between the known Xe II levels. Only classifiable lines are included in our compilation. Many other lines are listed in the references but are not included since we cannot be sure that they are from Xe II when they do not fit the known levels.

Transition probability calculations utilizing the Cowan codes [81COW] with empirically adjusted configuration average energies are used to help resolve choices between multiple possible classifications of lines. Some of the lines that appear in the energetic sources of Gallardo and co-workers may not be seen in more conventional sources. We include these lines in our list. Also the lines observed from these sources may well be shifted by the high fields in the sources. Intensities have been taken from the stated sources.

From Hansen and Persson [87HAN] we use the wavelength from the gentler "LC" excitation rather than the "C" excitation when both values are given. Since more intensities for "C" excitation are available, we use these intensity values. If only "LC" intensity is quoted, we use that value and add a "∧" to the intensity in the line table to indicate that this was done.

The intensity codes given in the Xe II line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
b	blend
d	double
h	hazy
H	very hazy
a	asymmetric
c	affected (by)
l	unsymmetrical-shaded to longer wavelength
s	unsymmetrical-shaded to shorter wavelength
w	wide
*	two or more classifications of this line share the same intensity
∧	see explanation in preceding paragraph

The values of g_J included in the Xe II level table were compiled by Hansen and Persson [87HAN] with one additional value [87SCH]. The uncertainty of the additional value has been included in parentheses.

References

36BOY J. C. Boyce, Phys. Rev. **49**, 730 (1936).

39HUM C. J. Humphreys, J. Res. Nat. Bur. Stand. **22**, 19 (1939).

70HUM C. J. Humphreys and E. Paul, Jr., J. Opt. Soc. Am. **60**, 1454 (1970).

TABLE 4. Sources of Xe II lines

Source	Number of classifications	Light source	Wavelength range (Å)	Uncertainty (Å)
81GAL	1	energetic excitation in laser-tube-like source	3048	0.01
82REY	39	energetic excitation in laser-tube-like source	2040–4180	0.01–0.05
83BER	106	energetic excitation in laser-tube-like source	2172–6744	0.05
87HAN	939	compilation from work of Humphreys and of Boyce (see text)	675–10 221	0.01–0.05 for 2 d.p. lines 0.1 for 1 d.p. lines
93GAL	28	energetic excitation in laser-tube-like source	2021–6757	0.01
02ZIE	2	high-current hollow cathode	10 914–11 117	0.02 (estimate)

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

81GAL M. Gallardo and J. G. Reyna Almandos, *Xenon Lines in the Range from 2000 Å to 7000 Å*, Serie ''Monografias Cientificas'' No. 1 (Centro de Investigaciones Opticas, La Plata, 1981).

81HUM C. J. Humphreys, Compilation of the Spectra of Ionized Xenon, 1981 (unpublished).

82REY J. G. Reyna Almandos, M. Gallardo, and M. Garavaglia, Opt. Pura Apl. **15**, 1 (1982).

83BER G. Bertuccelli, J. G. Reyna Almandos, O. Di Rocco, and M. Gallardo, Opt. Pura Apl. **16**, 163 (1983).

87HAN J. E. Hansen and W. Persson, Phys. Scr. **36**, 602 (1987).

87SCH T. J. Scholl, S. D. Rosner, and R. A. Holt, Phys. Rev. A **35**, 1611 (1987).

93GAL M. Gallardo, M. Raineri, and J. G. Reyna Almandos, Spectrosc. Lett. **26**, 1241 (1993).

02ZIE S. Zielińska, Ł. Bratasz, and K. Dzierżęga, Phys. Scr. **66**, 454 (2002).

Energy levels of Xe II

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
0.00	1	$5p^5$	$^2P^\circ$	3/2		87HAN
10 537.01	1	$5p^5$	$^2P^\circ$	1/2		87HAN
90 873.83	0	$5s5p^6$	^2S	1/2	2.02	87HAN
93 068.44	0	$5p^4(^3P_2)6s$	[2]	5/2	1.56	87HAN
95 064.38	0	$5p^4(^3P_2)6s$	[2]	3/2	1.38	87HAN
101 157.48	0	$5p^4(^3P_0)6s$	[0]	1/2	2.43	87HAN
102 799.07	0	$5p^4(^3P_1)6s$	[1]	3/2	1.59	87HAN
106 906.12	0	$5p^4(^3P_1)6s$	[1]	1/2	1.79	87HAN
109 563.14	0	$5p^4(^1D_2)6s$	[2]	5/2	1.33	87HAN
112 924.84	0	$5p^4(^1D_2)6s$	[2]	3/2	0.95	87HAN
129 248.39	0	$5p^4(^1S_0)6s$	[0]	1/2		87HAN
95 396.74	0	$5p^4(^3P_2)5d$	[2]	5/2	1.36	87HAN
95 437.67	0	$5p^4(^3P_2)5d$	[3]	7/2	1.420(14)	87HAN
96 033.48	0	$5p^4(^3P_2)5d$	[2]	3/2	1.18	87HAN
96 858.18	0	$5p^4(^3P_2)5d$	[1]	1/2	0.50	87HAN
99 404.99	0	$5p^4(^3P_2)5d$	[4]	9/2	1.31	87HAN
101 535.67	0	$5p^4(^3P_2)5d$	[4]	7/2	1.11	87HAN
104 250.06	0	$5p^4(^3P_1)5d$	[1]	1/2	0.56	87HAN
105 313.33	0	$5p^4(^3P_2)5d$	[1]	3/2	1.15	87HAN
105 947.55	0	$5p^4(^3P_2)5d$	[0]	1/2	1.36	87HAN
106 475.21	0	$5p^4(^3P_2)5d$	[3]	5/2		87HAN
107 381.74	0	$5p^4(^3P_0)5d$	[2]	3/2	0.67	87HAN
107 904.50	0	$5p^4(^3P_1)5d$	[1]	3/2	1.20	87HAN
108 007.28	0	$5p^4(^3P_0)5d$	[2]	5/2	1.22	87HAN
108 423.07	0	$5p^4(^3P_1)5d$	[3]	7/2	1.15	87HAN
111 326.96	0	$5p^4(^3P_1)5d$	[2]	3/2	1.24	87HAN
112 703.64	0	$5p^4(^3P_1)5d$	[2]	5/2	1.13	87HAN
114 751.08	0	$5p^4(^3P_1)5d$	[3]	5/2	1.10	87HAN
114 905.15	0	$5p^4(^1D_2)5d$	[4]	9/2	1.10	87HAN

Energy levels of Xe II—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
114 913.98	0	$5p^4(^1D_2)5d$	[4]	7/2		87HAN
119 085.49	0	$5p^4(^1D_2)5d$	[3]	5/2	0.95	87HAN
120 853.16	0	$5p^4(^1D_2)5d$	[3]	7/2		87HAN
124 070.06	0	$5p^4(^1D_2)5d$	[1]	3/2		87HAN
124 301.96	0	$5p^4(^1D_2)5d$	[2]	5/2		87HAN
127 010.80	0	$5p^4(^1D_2)5d$	[1]	1/2		87HAN
127 527.30	0	$5p^4(^1D_2)5d$	[2]	3/2		87HAN
135 060.97	0	$5p^4(^1D_2)5d$	[0]	1/2	2.03	87HAN
136 569.63	0	$5p^4(^1S_0)5d$	[2]	5/2		87HAN
138 062.59	0	$5p^4(^1S_0)5d$	[2]	3/2	1.00	87HAN
111 792.17	1	$5p^4(^3P_2)6p$	[2]°	3/2	1.61	87HAN
111 958.89	1	$5p^4(^3P_2)6p$	[2]°	5/2	1.47	87HAN
113 512.36	1	$5p^4(^3P_2)6p$	[3]°	5/2	1.28	87HAN
113 672.89	1	$5p^4(^3P_2)6p$	[1]°	1/2	1.50	87HAN
113 705.40	1	$5p^4(^3P_2)6p$	[3]°	7/2	1.40	87HAN
116 783.09	1	$5p^4(^3P_2)6p$	[1]°	3/2	1.37	87HAN
120 414.87	1	$5p^4(^3P_0)6p$	[1]°	1/2	0.56	87HAN
121 179.80	1	$5p^4(^3P_1)6p$	[0]°	1/2	2.08	87HAN
121 628.82	1	$5p^4(^3P_0)6p$	[1]°	3/2	1.28	87HAN
123 112.54	1	$5p^4(^3P_1)6p$	[2]°	5/2	1.39	87HAN
123 254.60	1	$5p^4(^3P_1)6p$	[2]°	3/2	1.35	87HAN
124 289.45	1	$5p^4(^3P_1)6p$	[1]°	3/2	1.32	87HAN
124 571.09	1	$5p^4(^3P_1)6p$	[1]°	1/2	1.16	87HAN
128 867.20	1	$5p^4(^1D_2)6p$	[3]°	5/2	0.92	87HAN
129 667.35	1	$5p^4(^1D_2)6p$	[1]°	3/2	1.40	87HAN
130 063.96	1	$5p^4(^1D_2)6p$	[3]°	7/2	1.15	87HAN
131 923.79	1	$5p^4(^1D_2)6p$	[2]°	3/2	0.90	87HAN
132 207.76	1	$5p^4(^1D_2)6p$	[2]°	5/2	1.20	87HAN
132 741.15	1	$5p^4(^1D_2)6p$	[1]°	1/2	0.71	87HAN
148 224.69	1	$5p^4(^1S_0)6p$	[1]°	1/2		87HAN
149 191.69	1	$5p^4(^1S_0)6p$	[1]°	3/2		87HAN
132 518.82	0	$5p^4(^3P_2)7s$	[2]	5/2	1.53	87HAN
133 189.42	0	$5p^4(^3P_2)7s$	[2]	3/2	1.40	87HAN
140 883.42	0	$5p^4(^3P_0)7s$	[0]	1/2	2.25	87HAN
142 382.13	0	$5p^4(^3P_1)7s$	[1]	3/2	1.59	87HAN
142 929.90	0	$5p^4(^3P_1)7s$	[1]	1/2	1.05	87HAN
149 697.24	0	$5p^4(^1D_2)7s$	[2]	5/2		87HAN
149 802.80	0	$5p^4(^1D_2)7s$	[2]	3/2		87HAN
135 507.32	0	$5p^4(^3P_2)6d$	[3]	7/2	1.39	87HAN
135 547.13	0	$5p^4(^3P_2)6d$	[2]	5/2	1.33	87HAN
135 708.32	0	$5p^4(^3P_2)6d$	[2]	3/2	1.33	87HAN
136 109.65	0	$5p^4(^3P_2)6d$	[4]	9/2	1.28	87HAN
136 554.11	0	$5p^4(^3P_2)6d$	[1]	1/2	0.94	87HAN
136 597.81	0	$5p^4(^3P_2)6d$	[4]	7/2	1.14	87HAN
138 726.59	0	$5p^4(^3P_2)6d$	[0]	1/2	1.86	87HAN
139 094.28	0	$5p^4(^3P_2)6d$	[3]	5/2	1.14	87HAN
139 640.43	0	$5p^4(^3P_2)6d$	[1]	3/2	1.14	87HAN
144 140.16	0	$5p^4(^3P_0)6d$	[2]	3/2	0.83	87HAN
144 384.90	0	$5p^4(^3P_0)6d$	[2]	5/2	1.21	87HAN
145 222.72	0	$5p^4(^3P_1)6d$	[1]	1/2	0.38	87HAN
145 587.61	0	$5p^4(^3P_1)6d$	[3]	7/2	1.27	87HAN
145 940.34	0	$5p^4(^3P_1)6d$	[2]	3/2	1.04	87HAN
146 305.54	0	$5p^4(^3P_1)6d$	[2]	5/2	1.30	87HAN
146 927.86	0	$5p^4(^3P_1)6d$	[3]	5/2	0.98	87HAN
148 085.19	0	$5p^4(^3P_1)6d$	[1]	3/2	1.07	87HAN
152 708.92	0	$5p^4(^1D_2)6d$	[4]	7/2	0.92	87HAN
152 806.73	0	$5p^4(^1D_2)6d$	[4]	9/2	1.11	87HAN
153 584.09	0	$5p^4(^1D_2)6d$	[1]	3/2		87HAN
153 585.71	0	$5p^4(^1D_2)6d$	[3]	5/2	1.02	87HAN
153 978.37	0	$5p^4(^1D_2)6d$	[3]	7/2	1.14	87HAN
154 032.42	0	$5p^4(^1D_2)6d$	[2]	5/2	1.05	87HAN
154 382.83	0	$5p^4(^1D_2)6d$	[1]	1/2		87HAN
154 608.07	0	$5p^4(^1D_2)6d$	[2]	3/2		87HAN

Energy levels of Xe II—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
138 967.87	1	$5p^4(^3P_2)4f$	[4]°	9/2		87HAN
139 005.27	1	$5p^4(^3P_2)4f$	[3]°	7/2		87HAN
139 182.58	1	$5p^4(^3P_2)4f$	[3]°	5/2		87HAN
139 498.46	1	$5p^4(^3P_2)4f$	[2]°	3/2		87HAN
139 782.0	1	$5p^4(^3P_2)4f$	[5]°	11/2		87HAN
139 903.63	1	$5p^4(^3P_2)4f$	[5]°	9/2		87HAN
140 029.99	1	$5p^4(^3P_2)4f$	[4]°	7/2	1.09	87HAN
140 185.67	1	$5p^4(^3P_2)4f$	[1]°	1/2		87HAN
140 209.99	1	$5p^4(^3P_2)4f$	[2]°	5/2		87HAN
140 335.09	1	$5p^4(^3P_2)4f$	[1]°	3/2		87HAN
147 517.71	1	$5p^4(^3P_0)4f$	[3]°	5/2		87HAN
147 569.10	1	$5p^4(^3P_0)4f$	[3]°	7/2		87HAN
148 375.10	1	$5p^4(^3P_1)4f$	[2]°	3/2		87HAN
148 585.89	1	$5p^4(^3P_1)4f$	[4]°	9/2		87HAN
148 951.80	1	$5p^4(^3P_1)4f$	[2]°	5/2		87HAN
149 280.40	1	$5p^4(^3P_1)4f$	[4]°	7/2		87HAN
149 682.65	1	$5p^4(^3P_1)4f$	[3]°	7/2		87HAN
149 800.20	1	$5p^4(^3P_1)4f$	[3]°	5/2		87HAN
155 463.41	1	$5p^4(^1D_2)4f$	[1]°	3/2		87HAN
156 128.46	1	$5p^4(^1D_2)4f$	[5]°	11/2		87HAN
156 201.84	1	$5p^4(^1D_2)4f$	[5]°	9/2		87HAN
156 235.80	1	$5p^4(^1D_2)4f$	[2]°	5/2		87HAN
156 302.13	1	$5p^4(^1D_2)4f$	[2]°	3/2		87HAN
157 102.56	1	$5p^4(^1D_2)4f$	[3]°	7/2		87HAN
157 221.03	1	$5p^4(^1D_2)4f$	[3]°	5/2		87HAN
157 416.58	1	$5p^4(^1D_2)4f$	[4]°	9/2		87HAN
157 432.63	1	$5p^4(^1D_2)4f$	[4]°	7/2		87HAN
139 128.78	1	$5p^4(^3P_2)7p$	[2]°	5/2		87HAN
139 193.80	1	$5p^4(^3P_2)7p$	[1]°	3/2		87HAN
139 645.98	1	$5p^4(^3P_2)7p$	[3]°	5/2		87HAN
139 733.89	1	$5p^4(^3P_2)7p$	[3]°	7/2		87HAN
140 011.58	1	$5p^4(^3P_2)7p$	[1]°	1/2		87HAN
140 986.89	1	$5p^4(^3P_2)7p$	[2]°	3/2		87HAN
147 310.54	0	$5p^4(^3P_2)8s$	[2]	5/2		87HAN
147 564.38	0	$5p^4(^3P_2)8s$	[2]	3/2		87HAN
157 091.9	0	$5p^4(^3P_1)8s$	[1]	3/2		87HAN
157 368.5	0	$5p^4(^3P_1)8s$	[1]	1/2		87HAN
150 096.85	1	$5p^4(^3P_2)5f$	[5]°	11/2		87HAN
150 211.76	1	$5p^4(^3P_2)5f$	[5]°	9/2		87HAN
151 442.28	0	$5p^4(^3P_2)5g$	[5]	9/2		87HAN
151 446.61	0	$5p^4(^3P_2)5g$	[4]	7/2		87HAN
151 451.30	0	$5p^4(^3P_2)5g$	[5]	11/2		87HAN
151 452.61	0	$5p^4(^3P_2)5g$	[4]	9/2		87HAN
151 498.90	0	$5p^4(^3P_2)5g$	[3]	7/2		87HAN
151 500.96	0	$5p^4(^3P_2)5g$	[3]	5/2		87HAN
151 522.5	0	$5p^4(^3P_2)5g$	[6]	13/2		87HAN
151 522.63	0	$5p^4(^3P_2)5g$	[6]	11/2		87HAN
151 564.44	0	$5p^4(^3P_2)5g$	[2]	3/2		87HAN
151 564.61	0	$5p^4(^3P_2)5g$	[2]	5/2		87HAN
159 617.11	0	$5p^4(^3P_0)5g$	[4]	7/2		87HAN
159 617.54	0	$5p^4(^3P_0)5g$	[4]	9/2		87HAN
161 238.07	0	$5p^4(^3P_1)5g$	[3]	5/2		87HAN
161 238.22	0	$5p^4(^3P_1)5g$	[3]	7/2		87HAN
161 257.45	0	$5p^4(^3P_1)5g$	[5]	11/2		87HAN
161 354.15	0	$5p^4(^3P_1)5g$	[4]	7/2		87HAN
161 354.8	0	$5p^4(^3P_1)5g$	[4]	9/2		87HAN
155 828.73	1	$5p^4(^3P_2)6f$	[5]°	11/2		87HAN
155 842.04	1	$5p^4(^3P_2)6f$	[5]°	9/2		87HAN
156 872.9	0	$5p^4(^3P_2)6g$	[5]	11/2		87HAN
156 873.84	0	$5p^4(^3P_2)6g$	[5]	9/2		87HAN
156 875.52	0	$5p^4(^3P_2)6g$	[4]	7/2		87HAN

Energy levels of Xe II—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
156 876.96	0	$5p^4(^3P_2)6g$	[4]	9/2		87HAN
156 902.5	0	$5p^4(^3P_2)6g$	[3]	5/2		87HAN
156 904.21	0	$5p^4(^3P_2)6g$	[3]	7/2		87HAN
156 913.68	0	$5p^4(^3P_2)6g$	[6]	11/2		87HAN
156 913.8	0	$5p^4(^3P_2)6g$	[6]	13/2		87HAN
160 143.92	0	$5p^4(^3P_2)7g$	[5]	11/2		87HAN
160 162.9	0	$5p^4(^3P_2)7g$	[6]	13/2		87HAN
160 164.2	0	$5p^4(^3P_2)7g$	[6]	11/2		87HAN

Spectral lines of Xe II

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
675.295	148 083.	3	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.01	87HAN
677.666	147 565.	1	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.01	87HAN
680.645	146 919.	5b?	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.01	87HAN
692.588	144 386.	1	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.01	87HAN
699.660	142 927.	0	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
702.342	142 381.	2	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
716.129	139 639.6	2	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.01	87HAN
718.936	139 094.4	3	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.01	87HAN
720.839	138 727.2	2	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)6d$	[0]	1/2	0.01	87HAN
724.303	138 063.8	2	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.01	87HAN
732.266	136 562.4	2d*	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.01	87HAN
732.266	136 562.4	2d*	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)6d$	[1]	1/2	0.01	87HAN
740.406	135 061.0	2	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)5d$	[0]	1/2	0.01	87HAN
750.815	133 188.6	2	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.01	87HAN
755.321	132 394.0	0	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
758.508	131 837.8	6bXe IV	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
767.203	130 343.6	0	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.01	87HAN
773.689	129 250.9	1	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1S_0)6s$	[0]	1/2	0.01	87HAN
774.572	129 103.6	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.01	87HAN
784.152	127 526.3	4*	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)5d$	[2]	3/2	0.01	87HAN
784.152	127 526.3	4*	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.01	87HAN
787.343	127 009.4	5	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)5d$	[1]	1/2	0.01	87HAN
793.553	126 015.5	0	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_2)6d$	[1]	1/2	0.01	87HAN
803.066	124 522.8	1	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1D_2)5d$	[0]	1/2	0.01	87HAN
804.504	124 300.2	7	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)5d$	[2]	5/2	0.01	87HAN
806.009	124 068.1	4	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)5d$	[1]	3/2	0.01	87HAN
839.740	119 084.5	5	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)5d$	[3]	5/2	0.01	87HAN
842.388	118 710.1	6	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1S_0)6s$	[0]	1/2	0.01	87HAN
854.778	116 989.4	6d	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1D_2)5d$	[2]	3/2	0.01	87HAN
858.580	116 471.4	4b	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1D_2)5d$	[1]	1/2	0.01	87HAN
871.458	114 750.2	7	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)5d$	[3]	5/2	0.01	87HAN
880.802	113 532.9	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1D_2)5d$	[1]	3/2	0.01	87HAN
885.544	112 924.9	3	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)6s$	[2]	3/2	0.01	87HAN
887.280	112 704.0	8	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)5d$	[2]	5/2	0.01	87HAN
898.255	111 327.0	0	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)5d$	[2]	3/2	0.01	87HAN
912.716	109 563.1	8	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^1D_2)6s$	[2]	5/2	0.01	87HAN
925.866	108 007.0	5	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_0)5d$	[2]	5/2	0.01	87HAN
926.741	107 905.0	3	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)5d$	[1]	3/2	0.01	87HAN
931.260	107 381.4	5	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_0)5d$	[2]	3/2	0.01	87HAN
935.405	106 905.6	5cXe IV	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)6s$	[1]	1/2	0.01	87HAN
939.186	106 475.2	6	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)5d$	[3]	5/2	0.01	87HAN
943.859	105 948.0	3	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)5d$	[0]	1/2	0.01	87HAN
949.544	105 313.7	7	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)5d$	[1]	3/2	0.01	87HAN
959.230	104 250.3	7	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)5d$	[1]	1/2	0.01	87HAN
972.769	102 799.3	6	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_1)6s$	[1]	3/2	0.01	87HAN
976.678	102 387.9	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^1D_2)6s$	[2]	3/2	0.01	87HAN
988.555	101 157.8	8	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_0)6s$	[0]	1/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
992.165	100 789.7	6	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)5d$	[2]	3/2	0.01	87HAN
1027.050	97 366.2	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)5d$	[1]	3/2	0.01	87HAN
1032.438	96 858.1	3	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)5d$	[1]	1/2	0.01	87HAN
1032.596	96 843.3	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_0)5d$	[2]	3/2	0.01	87HAN
1037.680	96 368.8	6	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)6s$	[1]	1/2	0.01	87HAN
1041.306	96 033.3	10	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)5d$	[2]	3/2	0.01	87HAN
1048.120	95 408.9	2c	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_2)5d$	[0]	1/2	0.01	87HAN
1048.272	95 395.1	8	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)5d$	[2]	5/2	0.01	87HAN
1051.920	95 064.3	10	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)6s$	[2]	3/2	0.01	87HAN
1067.088	93 713.0	6	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)5d$	[1]	1/2	0.01	87HAN
1074.476	93 068.6	12	$5p^5$	$^2P^\circ$	3/2	–	$5p^4(^3P_2)6s$	[2]	5/2	0.01	87HAN
1083.860	92 262.8	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_1)6s$	[1]	3/2	0.01	87HAN
1100.432	90 873.4	10	$5p^5$	$^2P^\circ$	3/2	–	$5s5p^6$	^2S	1/2	0.01	87HAN
1103.515	90 619.5	0	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_0)6s$	[0]	1/2	0.01	87HAN
1158.474	86 320.5	5	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_2)5d$	[1]	1/2	0.01	87HAN
1169.633	85 496.9	2	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_2)5d$	[2]	3/2	0.01	87HAN
1183.053	84 527.1	8	$5p^5$	$^2P^\circ$	1/2	–	$5p^4(^3P_2)6s$	[2]	3/2	0.01	87HAN
1244.756	80 337.0	5	$5p^5$	$^2P^\circ$	1/2	–	$5s5p^6$	^2S	1/2	0.01	87HAN
1881.485	53 149.5	0	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	$[4]^\circ$	9/2	0.01	87HAN
1972.673	50 692.6	0	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)5f$	$[5]^\circ$	11/2	0.01	87HAN

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2021.14	49 461.1	1	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	3/2	0.01	93GAL
2036.16	49 096.3	0a	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[3]^\circ$	7/2	0.01	93GAL
2040.42	48 993.8	0	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^1D_2)4f$	$[4]^\circ$	9/2	0.05	82REY
2043.46	48 920.9	0a	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.05	82REY
2053.697	48 677.1	0	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)5f$	$[5]^\circ$	9/2	0.01	87HAN
2065.55	48 397.8	0	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.05	82REY
2068.33	48 332.8	0a	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	5/2	0.05	82REY
2069.95	48 294.9	0	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.05	82REY
2076.32	48 146.8	1	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_1)4f$	$[3]^\circ$	7/2	0.05	82REY
2102.84	47 539.7	0	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[3]^\circ$	7/2	0.05	82REY
2108.24	47 417.9	0a	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)6f$	$[5]^\circ$	9/2	0.01	93GAL
2117.21	47 217.0	1	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_1)4f$	$[2]^\circ$	3/2	0.05	82REY
2120.61	47 141.3	1	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	5/2	0.05	82REY
2124.73	47 049.9	2	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_1)4f$	$[4]^\circ$	9/2	0.05	82REY
2128.73	46 961.5	1	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[4]^\circ$	7/2	0.05	82REY
2138.85	46 739.4	1	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.05	82REY
2142.25	46 665.2	0	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[3]^\circ$	7/2	0.01	93GAL
2146.31	46 576.9	0	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[3]^\circ$	5/2	0.01	93GAL
2153.08	46 430.5	0a	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	3/2	0.05	82REY
2154.90	46 391.3	1	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^1S_0)6p$	$[1]^\circ$	3/2	0.01	93GAL
2166.05	46 152.5	1	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)4f$	$[2]^\circ$	5/2	0.05	82REY
2167.84	46 114.4	1	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[3]^\circ$	5/2	0.05	82REY
2170.40	46 060.0	1	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[2]^\circ$	5/2	0.01	93GAL
2171.64	46 033.7	2	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_0)4f$	$[3]^\circ$	7/2	0.05	83BER
2176.23	45 936.6	2	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[3]^\circ$	7/2	0.05	82REY
2178.25	45 894.0	0	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	$[3]^\circ$	5/2	0.05	82REY
2192.78	45 590.0	0	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[2]^\circ$	3/2	0.01	93GAL
2193.48	45 575.4	1*	$5p^4(^3P_2)6p$	$[2]^\circ$	3/2	–	$5p^4(^3P_1)8s$	[1]	1/2	0.05	83BER
2193.48	45 575.4	1*	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)4f$	$[2]^\circ$	3/2	0.05	83BER
2208.24	45 270.8	3	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	3/2	0.05	82REY
2214.37	45 145.5	3	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	5/2	0.05	82REY
2215.58	45 120.9	2	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	1/2	0.05	82REY
2222.76	44 975.1	3	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.05	82REY
2224.29	44 944.2	0*	$5p^4(^3P_2)6p$	$[2]^\circ$	5/2	–	$5p^4(^3P_2)6g$	[3]	7/2	0.05	83BER
2224.29	44 944.2	0*	$5p^4(^3P_2)6p$	$[2]^\circ$	5/2	–	$5p^4(^3P_2)6g$	[3]	5/2	0.05	83BER

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2224.59	44 938.1	2	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.05	82REY
2225.99	44 909.9	2	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.05	82REY
2230.79	44 813.2	1h	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.02	87HAN
2232.83	44 772.3	2	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.05	82REY
2234.99	44 729.0	1	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.05	82REY
2235.52	44 718.4	2	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.05	82REY
2239.79	44 633.2	1	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.05	82REY
2241.86	44 592.0	2h	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.02	87HAN
2245.61	44 517.52	1	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.01	93GAL
2247.17	44 486.62	1	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.01	93GAL
2248.22	44 465.8	1	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[5]°	9/2	0.05	82REY
2249.86	44 433.44	4	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
2254.74	44 337.28	1	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.01	93GAL
2256.56	44 301.5	1h	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.02	87HAN
2256.82	44 296.4	2*	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.05	83BER
2256.82	44 296.4	2*	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.05	83BER
2259.22	44 249.4	1h	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.02	87HAN
2261.33	44 208.1	0	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.05	83BER
2262.95	44 176.44	2	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
2264.20	44 152.05	2	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	87HAN
2264.99	44 136.65	3	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.01	93GAL
2265.62	44 124.4	3h	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
2265.94	44 118.1	2h	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.02	87HAN
2266.80	44 101.4	3h	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.02	87HAN
2268.72	44 064.1	1h	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
2273.18	43 977.6	1	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.05	83BER
2273.37	43 973.97	3	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.01	93GAL
2282.60	43 796.17	0b	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.01	93GAL
2283.14	43 785.8	5	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.05	82REY
2285.24	43 745.6	2h	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.02	87HAN
2285.94	43 732.19	8	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.01	87HAN
2287.92	43 694.3	2	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_1)8s$	[1]	1/2	0.05	83BER
2290.84	43 638.7	2h	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
2292.01	43 616.4	2b	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.05	82REY
2292.40	43 608.96	20	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
2294.57	43 567.72	15	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
2296.52	43 530.73	30	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.01	87HAN
2299.36	43 477.0	2h	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.02	87HAN
2299.98	43 465.25	6	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
2304.60	43 378.1	1h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.02	87HAN
2307.28	43 327.75	3	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	87HAN
2308.15	43 311.4	3	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.05	82REY
2313.70	43 207.53	5	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
2314.21	43 198.0	1b*	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6g$	[3]	7/2	0.05	83BER
2314.21	43 198.0	1b*	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6g$	[3]	5/2	0.05	83BER
2316.27	43 159.6	2	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.05	83BER
2316.80	43 149.72	10	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
2319.70	43 095.78	7	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.01	87HAN
2321.54	43 061.6	0	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.05	83BER
2335.42	42 805.7	2h	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.02	87HAN
2342.18	42 682.2	3h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.02	87HAN
2344.47	42 640.50	12	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
2350.10	42 538.4	0a	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.05	82REY
2350.70	42 527.5	0	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.05	82REY
2351.18	42 518.8	4h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.02	87HAN
2351.56	42 512.0	4h	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[4]°	9/2	0.02	87HAN
2352.06	42 502.9	1	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[4]°	9/2	0.05	82REY
2353.52	42 476.5	1h	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
2353.89	42 469.9	1h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.02	87HAN
2356.25	42 427.3	1h	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2356.72	42 418.88	4h	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.01	87HAN
2360.42	42 352.4	1h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.02	87HAN
2362.90	42 307.9	0b	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.05	83BER
2364.13	42 285.9	0	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.05	83BER
2364.63	42 277.0	0	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.05	83BER
2368.68	42 204.71	5	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.01	87HAN
2369.03	42 198.5	0	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.05	83BER
2369.62	42 187.97	4h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.01	87HAN
2379.11	42 019.7	0	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)6d$	[3]	7/2	0.05	83BER
2385.85	41 901.01	1	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.01	87HAN
2386.14	41 895.9	2h	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.02	87HAN
2387.75	41 867.67	4	$5s5p^6$	^2S	1/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
2391.10	41 809.02	2	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.01	93GAL
2392.33	41 787.5	2h	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)5f$	[5]°	9/2	0.02	87HAN
2398.76	41 675.52	4	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
2404.84	41 570.2	1	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.05	83BER
2405.92	41 551.5	3h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.02	87HAN
2409.74	41 485.64	40	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.01	87HAN
2410.72	41 468.77	7	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.01	87HAN
2419.50	41 318.3	0	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.05	83BER
2420.87	41 294.9	2b	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[5]°	9/2	0.05	82REY
2421.27	41 288.10	20h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[5]°	9/2	0.01	87HAN
2422.12	41 273.61	2	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.01	87HAN
2422.94	41 259.64	10	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
2425.05	41 223.75	40h	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[5]°	11/2	0.01	87HAN
2432.72	41 093.78	12	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.01	87HAN
2435.47	41 047.39	6	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.01	87HAN
2438.76	40 992.02	1-	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.01	87HAN
2441.60	40 944.3	2h	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
2442.54	40 928.6	1	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^3P_2)6f$	[5]°	9/2	0.05	83BER
2442.78	40 924.6	1H	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^3P_2)6f$	[5]°	11/2	0.05	87HAN
2446.79	40 857.5	0	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.05	83BER
2466.60	40 529.4	2h	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
2468.43	40 499.34	5	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[5]°	9/2	0.01	87HAN
2470.18	40 470.65	5	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.01	87HAN
2475.89	40 377.32	100	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[5]°	11/2	0.01	87HAN
2478.82	40 329.59	4	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.01	87HAN
2479.40	40 320.2	1	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.05	83BER
2489.11	40 162.88	50	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[4]°	9/2	0.01	87HAN
2490.76	40 136.28	20	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.01	87HAN
2491.78	40 119.85	5	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
2509.98	39 829.0	0	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.05	83BER
2517.06	39 716.9	1	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.05	82REY
2523.67	39 612.9	0	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.05	82REY
2523.97	39 608.2	1	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)5g$	[3]	5/2	0.05	83BER
2524.46	39 600.52	3	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
2526.79	39 564.01	12	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.01	87HAN
2526.98	39 561.03	12	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.01	87HAN
2530.18	39 511.00	2	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.01	87HAN
2538.02	39 389.0	3h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
2551.70	39 177.80	3	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2553.79	39 145.7	0	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.05	83BER
2554.20	39 139.46	1-	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
2561.48	39 028.23	2	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	87HAN
2572.93	38 854.6	0*	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.05	83BER
2572.93	38 854.6	0*	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.05	83BER
2576.97	38 793.65	15	$5s5p^6$	^2S	1/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
2584.88	38 674.94	1	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
2597.01	38 494.31	4	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.01	87HAN
2598.42	38 473.42	2	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2605.54	38 368.30	50	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[5]°	9/2	0.01	87HAN
2606.93	38 347.84	5	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.01	87HAN
2607.52	38 339.16	1	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
2617.14	38 198.2	0	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.05	83BER
2621.39	38 136.3	2h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.02	87HAN
2623.17	38 110.4	2	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.05	83BER
2629.54	38 018.13	5h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.01	87HAN
2630.40	38 005.70	6h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.01	87HAN
2633.88	37 955.49	2	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.01	87HAN
2640.54	37 859.8	1	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[2]	5/2	0.05	83BER
2648.83	37 741.3	1	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.05	83BER
2655.39	37 648.05	2h	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
2657.00	37 625.2	5h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.01	87HAN
2659.28	37 593.0	1h	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
2663.29	37 536.38	3	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2668.02	37 469.84	5	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
2670.68	37 432.52	1	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.01	87HAN
2672.22	37 410.95	4	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
2683.72	37 250.6	0	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.05	83BER
2686.14	37 217.1	3h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.02	87HAN
2691.53	37 142.56	1	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
2698.39	37 048.1	0	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.05	83BER
2702.22	36 995.64	2	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
2703.44	36 978.94	10	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
2705.38	36 952.4	0	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_1)8s$	[1]	1/2	0.05	83BER
2711.02	36 875.6	1h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.02	87HAN
2712.17	36 859.9	1	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.05	83BER
2715.76	36 811.20	3	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
2718.79	36 770.17	1-	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
2721.28	36 736.53	1-^	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.01	87HAN
2723.40	36 707.93	1^	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
2725.66	36 677.50	1-	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.01	87HAN
2731.46	36 599.62	1-	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
2733.15	36 577.0	25hs	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.02	87HAN
2734.14	36 563.75	50	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^1D_2)4f$	[4]°	9/2	0.01	87HAN
2739.77	36 488.62	1-	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.01	87HAN
2746.77	36 395.63	1-	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.01	87HAN
2747.68	36 383.58	1^	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
2748.79	36 368.89	1h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.01	87HAN
2751.76	36 329.6	0	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.05	83BER
2756.48	36 267.43	1-	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.01	87HAN
2757.86	36 249.3	40h*	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.02	87HAN
2757.86	36 249.3	40h*	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
2762.25	36 191.7	0	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.05	83BER
2762.77	36 184.87	2	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.01	87HAN
2763.56	36 174.52	1	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
2767.00	36 129.55	1	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.01	87HAN
2770.41	36 085.08	2h	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2774.86	36 027.22	15h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.01	87HAN
2781.92	35 935.79	0	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	82REY
2783.80	35 911.5	1h^	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.02	87HAN
2785.42	35 890.64	3	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
2792.52	35 799.39	1-	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
2794.68	35 771.73	1^	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.01	87HAN
2802.50	35 671.9	1h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
2819.02	35 462.9	1H	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.05	87HAN
2820.06	35 449.8	4h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
2825.34	35 383.6	1h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.02	87HAN
2827.90	35 351.5	2h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)8s$	[2]	5/2	0.02	87HAN
2832.00	35 300.4	2h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.02	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2836.16	35 248.57	1h	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
2840.64	35 193.0	0	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^3P_2)5f$	[5]°	11/2	0.05	83BER
2850.95	35 065.72	3	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
2852.39	35 048.0	3h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.02	87HAN
2853.11	35 039.18	1	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.01	87HAN
2854.53	35 021.75	60	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2857.32	34 987.6	1h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)6f$	[5]°	9/2	0.02	87HAN
2861.90	34 931.56	20h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
2864.73	34 897.06	150	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
2866.76	34 872.35	5h	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	87HAN
2867.36	34 865.05	2h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.01	87HAN
2881.14	34 698.30	1-^	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.01	87HAN
2883.71	34 667.38	12	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
2887.12	34 626.44	10	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
2889.07	34 603.07	10	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
2895.22	34 529.6	150h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.02	87HAN
2902.68	34 440.83	3	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.01	87HAN
2905.10	34 412.1	2h	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.02	87HAN
2907.18	34 387.52	80h	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2910.64	34 346.65	1h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.01	87HAN
2917.01	34 271.64	1-	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
2919.87	34 238.08	40	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	87HAN
2923.03	34 201.07	1-^	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.01	87HAN
2924.38	34 185.28	2	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
2927.58	34 147.91	2	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.01	87HAN
2933.34	34 080.9	1h	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.02	87HAN
2934.80	34 063.9	2h	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.02	87HAN
2935.86	34 051.6	60h	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.02	87HAN
2942.10	33 979.39	20h	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.01	87HAN
2949.77	33 891.0	4h	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.02	87HAN
2950.69	33 880.5	1h	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.02	87HAN
2951.58	33 870.26	2	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
2952.48	33 859.94	2	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2954.41	33 837.8	1	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.05	83BER
2958.50	33 791.0	0*	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_2)6g$	[3]	7/2	0.05	83BER
2958.50	33 791.0	0*	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_2)6g$	[3]	5/2	0.05	83BER
2963.41	33 735.06	50	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
2966.74	33 697.19	2^	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
2968.95	33 672.11	1^	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^3P_1)4f$	[4]°	9/2	0.01	87HAN
2972.31	33 634.05	8	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
2972.78	33 628.73	1	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[3]	7/2	0.01	87HAN
2973.21	33 623.9	0	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.05	83BER
2974.86	33 605.2	20Hl	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)8s$	[2]	5/2	0.05	87HAN
2979.32	33 554.91	300	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.01	87HAN
2986.82	33 470.66	8	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
2990.54	33 429.03	12*	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
2990.54	33 429.03	12*	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^1D_2)6d$	[2]	3/2	0.01	87HAN
2991.73	33 415.73	3*	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
2991.73	33 415.73	3*	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.01	87HAN
3003.98	33 279.47	40	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.01	87HAN
3005.97	33 257.44	1-	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.01	87HAN
3006.97	33 246.38	2	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.01	87HAN
3009.03	33 223.6	0b	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.05	83BER
3013.82	33 170.8	2h^	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.02	87HAN
3015.52	33 152.1	20h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.02	87HAN
3017.43	33 131.1	100h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.02	87HAN
3019.78	33 105.35	2h	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.01	87HAN
3022.10	33 079.9	2H	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)8s$	[1]	1/2	0.05	87HAN
3027.27	33 023.45	3	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
3027.63	33 019.5	2h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.02	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3033.71	32 953.35	10	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	3/2	0.01	87HAN
3036.80	32 919.8	30h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[3]^\circ$	5/2	0.02	87HAN
3037.35	32 913.86	6h	$5p^4(^3P_2)6p$	$[1]^\circ$	3/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.01	87HAN
3044.75	32 833.87	10	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	$[3]^\circ$	5/2	0.01	87HAN
3045.25	32 828.48	30	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	5/2	0.01	87HAN
3046.27	32 817.48	25	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_0)4f$	$[3]^\circ$	7/2	0.01	87HAN
3047.56	32 803.6	0	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	1/2	0.05	83BER
3047.76	32 801.4	8H	$5p^4(^3P_1)6p$	$[1]^\circ$	3/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.02	87HAN
3047.83	32 800.69	0	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[3]^\circ$	7/2	0.01	81GAL
3048.17	32 797.03	5	$5p^4(^3P_1)6p$	$[1]^\circ$	1/2	–	$5p^4(^3P_1)8s$	[1]	1/2	0.01	87HAN
3048.50	32 793.5	3h^	$5p^4(^3P_2)6p$	$[3]^\circ$	5/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.02	87HAN
3050.98	32 766.82	3	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_0)4f$	$[3]^\circ$	5/2	0.01	87HAN
3055.50	32 718.4	1	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	$[1]^\circ$	3/2	0.05	83BER
3056.49	32 707.76	20	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	$[3]^\circ$	5/2	0.01	87HAN
3061.54	32 653.81	12	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	$[2]^\circ$	5/2	0.01	87HAN
3063.72	32 630.57	0	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	$[1]^\circ$	1/2	0.01	93GAL
3066.60	32 599.9	1h	$5p^4(^3P_2)6p$	$[3]^\circ$	7/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.02	87HAN
3067.30	32 592.49	30*	$5p^4(^3P_2)6p$	$[2]^\circ$	3/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.01	87HAN
3067.30	32 592.49	30*	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	3/2	0.01	87HAN
3073.17	32 530.24	2h	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	$[3]^\circ$	7/2	0.01	87HAN
3082.62	32 430.52	20	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	3/2	0.01	87HAN
3082.87	32 427.89	2	$5p^4(^3P_2)6p$	$[3]^\circ$	5/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.01	87HAN
3085.12	32 404.24	1-*	$5p^4(^3P_1)6p$	$[0]^\circ$	1/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.01	87HAN
3085.12	32 404.24	1-*	$5p^4(^3P_0)6p$	$[1]^\circ$	3/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.01	87HAN
3087.34	32 380.94	1-	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_1)6p$	$[2]^\circ$	3/2	0.01	87HAN
3090.47	32 348.15	1	$5p^4(^3P_2)6p$	$[2]^\circ$	3/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.01	87HAN
3092.41	32 327.85	15	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	3/2	0.01	87HAN
3094.53	32 305.7	30h	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	5/2	0.02	87HAN
3096.90	32 280.99	8	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	$[1]^\circ$	1/2	0.01	87HAN
3098.21	32 267.34	2	$5p^4(^3P_2)6p$	$[1]^\circ$	1/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.01	87HAN
3098.50	32 264.32	1	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	$[3]^\circ$	5/2	0.01	87HAN
3101.51	32 233.0	50h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.02	87HAN
3104.40	32 203.0	70h	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	5/2	0.02	87HAN
3106.54	32 180.82	0b	$5p^4(^3P_2)6p$	$[2]^\circ$	5/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.01	93GAL
3107.82	32 167.6	20Hl	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	5/2	0.05	87HAN
3112.74	32 116.72	20	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	3/2	0.01	87HAN
3116.78	32 075.09	2h	$5p^4(^3P_2)6p$	$[3]^\circ$	5/2	–	$5p^4(^3P_1)6d$	[3]	7/2	0.01	87HAN
3121.87	32 022.80	250	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[4]^\circ$	7/2	0.01	87HAN
3124.02	32 000.8	12h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	3/2	0.02	87HAN
3128.40	31 956.0	1H*	$5p^4(^3P_0)6p$	$[1]^\circ$	3/2	–	$5p^4(^1D_2)6d$	[3]	5/2	0.02	87HAN
3128.40	31 956.0	1H*	$5p^4(^3P_0)6p$	$[1]^\circ$	3/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.02	87HAN
3130.40	31 935.5	3H	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	$[2]^\circ$	5/2	0.02	87HAN
3142.54	31 812.2	0	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	$[1]^\circ$	3/2	0.05	83BER
3143.62	31 801.25	6	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	$[3]^\circ$	5/2	0.01	87HAN
3145.02	31 787.09	4h	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	5/2	0.01	87HAN
3148.99	31 747.02	5	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	$[2]^\circ$	5/2	0.01	87HAN
3150.97	31 727.1	3	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[3]^\circ$	7/2	0.05	83BER
3159.75	31 638.9	4h	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[3]^\circ$	5/2	0.02	87HAN
3162.93	31 607.11	25	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	$[4]^\circ$	7/2	0.01	87HAN
3164.23	31 594.12	6	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	3/2	0.01	87HAN
3165.27	31 583.74	6	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^1D_2)6p$	$[1]^\circ$	1/2	0.01	87HAN
3168.67	31 549.85	3h	$5p^4(^3P_2)6p$	$[1]^\circ$	1/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.02	87HAN
3174.59	31 491.02	1	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	$[2]^\circ$	3/2	0.01	87HAN
3175.64	31 480.61	80	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	$[5]^\circ$	9/2	0.01	87HAN
3181.39	31 423.71	3h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	$[2]^\circ$	3/2	0.02	87HAN
3184.35	31 394.50	10h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^1D_2)4f$	$[1]^\circ$	3/2	0.01	87HAN
3193.75	31 302.11	1h	$5p^4(^3P_2)6p$	$[1]^\circ$	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.01	87HAN
3194.85	31 291.3	0*	$5p^4(^1D_2)6p$	$[3]^\circ$	7/2	–	$5p^4(^3P_1)5g$	[4]	9/2	0.05	83BER
3194.85	31 291.3	0*	$5p^4(^1D_2)6p$	$[3]^\circ$	7/2	–	$5p^4(^3P_1)5g$	[4]	7/2	0.05	83BER
3196.22	31 277.92	25	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	$[3]^\circ$	5/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3201.68	31 224.58	3h	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
3202.04	31 221.07	10	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
3206.72	31 175.50	1-^	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
3211.59	31 128.2	1H	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^1D_2)6d$	[1]	1/2	0.05	87HAN
3212.29	31 121.45	5h	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
3225.08	30 998.03	15	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
3233.23	30 919.90	1	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.01	87HAN
3247.74	30 781.8	6Hl	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.05	87HAN
3248.83	30 771.43	1-^	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
3249.35	30 766.51	1-^	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
3250.04	30 759.98	2h	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
3250.56	30 755.06	25	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
3259.36	30 672.03	12	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
3260.73	30 659.14	2	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
3262.02	30 647.01	4h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.02	87HAN
3264.03	30 628.1	0	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.05	83BER
3267.34	30 597.12	3h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
3268.08	30 590.19	1h^	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.02	87HAN
3272.91	30 545.05	60	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.01	87HAN
3274.80	30 527.4	2H^	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)8s$	[2]	5/2	0.05	87HAN
3281.26	30 467.32	12h*	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.02	87HAN
3281.26	30 467.32	12h*	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.02	87HAN
3296.20	30 329.23	1h	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.02	87HAN
3298.72	30 306.06	6	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
3310.85	30 195.03	1h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.02	87HAN
3311.80	30 186.37	2	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
3313.48	30 171.07	2h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.02	87HAN
3316.39	30 144.59	6h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.02	87HAN
3320.57	30 106.65	1h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.02	87HAN
3327.46	30 044.31	15	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
3338.80	29 942.27	4h	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
3339.49	29 936.08	3	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
3347.27	29 866.5	3H	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.05	87HAN
3353.44	29 811.56	1h^	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^1D_2)6d$	[1]	1/2	0.02	87HAN
3366.72	29 693.97	300h	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.02	87HAN
3373.92	29 630.60	2h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.02	87HAN
3375.16	29 619.72	3h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.02	87HAN
3381.34	29 565.58	1h^	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
3384.13	29 541.21	40h	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
3386.30	29 522.28	2h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.02	87HAN
3388.05	29 507.03	2	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
3395.50	29 442.29	3	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
3399.37	29 408.78	1	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
3412.58	29 294.9	1H-	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.05	87HAN
3413.20	29 289.6	6H	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.05	87HAN
3417.04	29 256.70	1-	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
3420.73	29 225.14	40	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
3432.49	29 125.02	1	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
3436.48	29 091.20	1-	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.01	87HAN
3446.34	29 007.98	25h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
3460.08	28 892.79	8	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
3461.26	28 882.94	100h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.02	87HAN
3462.81	28 870.01	1-	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
3464.17	28 858.68	1h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.02	87HAN
3467.68	28 829.47	1-	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
3474.23	28 775.12	20h	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.01	87HAN
3482.21	28 709.18	2h	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.02	87HAN
3485.23	28 684.30	1h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.02	87HAN
3500.36	28 560.32	30	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
3503.15	28 537.57	15	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3504.25	28 528.62	1	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
3506.56	28 509.82	15	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
3508.88	28 490.97	20	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
3509.78	28 483.67	10bXe III	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.01	87HAN
3513.57	28 452.94	1	$5p^4(^1D_2)5d$	[1]	1/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.01	87HAN
3516.71	28 427.5	2	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.05	83BER
3521.53	28 388.6	2	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[3]	5/2	0.05	83BER
3530.21	28 318.83	3H	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.02	87HAN
3534.61	28 283.58	1h^	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.02	87HAN
3538.08	28 255.84	2	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
3539.41	28 245.2	0	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_2)5g$	[3]	5/2	0.05	83BER
3546.29	28 190.43	1h	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
3548.69	28 171.36	2h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.02	87HAN
3557.88	28 098.6	2b	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.05	83BER
3561.75	28 068.07	1-^	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.01	87HAN
3562.50	28 062.16	1-^	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.01	87HAN
3564.30	28 047.99	20	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
3578.58	27 936.07	2	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.01	87HAN
3588.62	27 857.91	6h	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
3589.02	27 854.8	2b	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.05	83BER
3589.88	27 848.14	1H	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.02	87HAN
3604.83	27 732.65	3h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[4]°	9/2	0.02	87HAN
3607.41	27 712.81	8	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
3611.52	27 681.28	1h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.02	87HAN
3612.37	27 674.76	20	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
3617.94	27 632.2	1	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.05	83BER
3621.98	27 601.34	3h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.02	87HAN
3634.48	27 506.41	1-	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
3644.43	27 431.32	5	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
3644.91	27 427.70	5	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
3645.29	27 424.8	3	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.05	83BER
3654.44	27 356.18	3b	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.01	93GAL
3657.74	27 331.50	5	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
3658.44	27 326.27	6h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.01	87HAN
3661.70	27 301.9	20H	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.05	87HAN
3663.93	27 285.33	5h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
3665.47	27 273.9	1	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_2)5g$	[2]	5/2	0.05	83BER
3672.57	27 221.14	20	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
3674.04	27 210.25	1-	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.01	87HAN
3684.07	27 136.2	1	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.05	83BER
3690.74	27 087.13	1	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.01	87HAN
3691.84	27 079.06	1h	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
3698.49	27 030.37	1h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.02	87HAN
3711.64	26 934.6	20H	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[0]	1/2	0.05	87HAN
3715.69	26 905.2	2H	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
3717.20	26 894.32	20	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
3720.80	26 868.30	40	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
3731.00	26 794.8	0b	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.05	83BER
3731.18	26 793.55	20	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
3741.11	26 722.4	0	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.05	83BER
3741.96	26 716.37	2Hw	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.02	87HAN
3745.46	26 691.4	3a	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	83BER
3756.87	26 610.34	10	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
3762.05	26 573.70	3h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.02	87HAN
3763.37	26 564.38	15	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
3765.66	26 548.2	0	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	83BER
3773.83	26 490.8	0	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.05	83BER
3775.49	26 479.11	1	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
3778.78	26 456.05	1-	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.01	87HAN
3780.70	26 442.6	1H	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.05	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3783.23	26 424.93	10h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
3787.32	26 396.40	3	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
3800.99	26 301.47	15h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
3805.68	26 269.06	1H	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.02	87HAN
3807.29	26 257.95	10h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
3810.67	26 234.7	0	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.05	83BER
3811.05	26 232.04	40	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
3815.16	26 203.78	1hw	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.01	87HAN
3823.35	26 147.65	2	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
3826.27	26 127.70	2h	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.02	87HAN
3829.77	26 103.82	10h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.01	87HAN
3848.58	25 976.24	6	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
3849.87	25 967.54	50Hl	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.02	87HAN
3858.53	25 909.26	20	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
3869.63	25 834.94	20	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
3883.67	25 741.5	1H	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)6d$	[2]	3/2	0.05	87HAN
3885.00	25 732.73	20	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
3885.45	25 729.8	4Hl	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.05	87HAN
3905.34	25 598.71	1	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
3905.85	25 595.37	10	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
3907.91	25 581.88	100h	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.02	87HAN
3916.60	25 525.12	1h	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.02	87HAN
3920.78	25 497.91	1h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.02	87HAN
3926.80	25 458.82	1	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
3928.42	25 448.3		$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.05	87HAN
3933.22	25 417.27	1	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
3937.66	25 388.61	2	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.01	87HAN
3938.92	25 380.49	15h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
3942.21	25 359.30	3	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
3943.57	25 350.56	20	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
3951.61	25 299.0	5Hl	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.05	87HAN
3954.73	25 279.02	20hl	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.02	87HAN
3962.15	25 231.7	0	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	83BER
3972.58	25 165.44	50Hl	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.02	87HAN
3975.59	25 146.39	4	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
3978.98	25 124.96	2h	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.02	87HAN
3980.41	25 115.94	2h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.02	87HAN
3981.21	25 110.89	1h	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)6d$	[3]	7/2	0.02	87HAN
3990.33	25 053.5	60Hl	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)6d$	[0]	1/2	0.05	87HAN
3996.05	25 017.64	3	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
4000.55	24 989.50	5h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[5]°	9/2	0.02	87HAN
4002.35	24 978.26	80Hl	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.02	87HAN
4003.09	24 973.6	1	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	83BER
4008.46	24 940.2	1H	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)6d$	[2]	3/2	0.05	87HAN
4016.56	24 889.89	2h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.02	87HAN
4017.86	24 881.84	2h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
4025.19	24 836.53	30	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
4026.20	24 830.3	5Hl	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
4026.82	24 826.5	0	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.05	83BER
4027.97	24 819.39	3h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.02	87HAN
4029.82	24 807.99	1-	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.01	87HAN
4035.87	24 770.81	1	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
4037.29	24 762.09	100	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[1]	1/2	0.01	87HAN
4037.59	24 760.25	200	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.01	87HAN
4039.69	24 747.38	1-	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.01	87HAN
4044.64	24 717.1	6H	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.05	87HAN
4044.90	24 715.5	8H	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)6d$	[1]	1/2	0.05	87HAN
4051.27	24 676.65	10h	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.02	87HAN
4057.46	24 639.0	200H	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[4]	7/2	0.05	87HAN
4062.12	24 610.74	6	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4066.53	24 584.0		$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.05	87HAN
4072.10	24 550.42	6h	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.02	87HAN
4073.50	24 541.98	15	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
4091.88	24 431.75	3h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.02	87HAN
4098.89	24 389.97	100h	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.02	87HAN
4100.34	24 381.34	20	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
4100.97	24 377.60	1h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
4103.10	24 364.94	8hl	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.02	87HAN
4104.95	24 353.96	40	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
4110.41	24 321.61	30	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
4112.14	24 311.38	30Hl	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.02	87HAN
4112.42	24 309.7	0	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.05	83BER
4113.26	24 304.76	2	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.01	87HAN
4113.52	24 303.22	2	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
4121.86	24 254.05	5h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
4131.01	24 200.33	20	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
4131.24	24 199.0	0	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_2)8s$	[2]	5/2	0.05	83BER
4138.81	24 154.72	3h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.02	87HAN
4148.19	24 100.10	2h*	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.02	87HAN
4148.19	24 100.10	2h*	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.02	87HAN
4152.74	24 073.70	1	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.01	87HAN
4154.65	24 062.63	2	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.01	87HAN
4156.17	24 053.83	2h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.02	87HAN
4158.04	24 043.0	200H	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.05	87HAN
4162.16	24 019.21	60	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
4170.99	23 968.4	8Hl	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.05	87HAN
4180.10	23 916.13	1000*	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.02	87HAN
4180.10	23 916.13	1000*	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[2]	3/2	0.02	87HAN
4180.29	23 915.05	1	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^1D_2)6d$	[3]	7/2	0.01	82REY
4193.15	23 841.70	500h	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)6d$	[4]	7/2	0.02	87HAN
4197.81	23 815.2	10H	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.05	87HAN
4201.25	23 795.7	15H	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
4203.22	23 784.58	5	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
4208.48	23 754.86	400h	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[2]	5/2	0.02	87HAN
4209.47	23 749.27	200h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[2]	3/2	0.02	87HAN
4213.72	23 725.32	400h	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.02	87HAN
4214.69	23 719.86	6	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
4215.30	23 716.4	0	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.05	83BER
4215.60	23 714.74	200	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
4223.00	23 673.18	400h	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.02	87HAN
4237.20	23 593.8		$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.05	87HAN
4237.96	23 589.6	3b	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.05	83BER
4238.25	23 588.00	500h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)6p$	[2]	5/2	0.02	87HAN
4243.88	23 556.71	10	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
4244.41	23 553.77	30	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
4245.38	23 548.39	500h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[3]	7/2	0.02	87HAN
4250.16	23 521.9		$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^1D_2)6d$	[3]	5/2	0.05	87HAN
4251.57	23 514.1	100H	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
4263.57	23 447.92	10h^	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.02	87HAN
4269.84	23 413.49	40	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
4295.17	23 275.4	1a	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.05	83BER
4296.40	23 268.75	500h	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)5d$	[0]	1/2	0.02	87HAN
4296.75	23 266.86	2	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.01	87HAN
4306.21	23 215.75	1h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.02	87HAN
4310.51	23 192.59	500h	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.02	87HAN
4321.82	23 131.90	40	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
4330.52	23 085.4	1000	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)6d$	[4]	7/2	0.05	87HAN
4335.81	23 057.26	10	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.01	87HAN
4337.07	23 050.6	30Hl	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.05	87HAN
4342.56	23 021.4	6Hl	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_2)8s$	[2]	5/2	0.05	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4357.28	22 943.6	0	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.05	83BER
4367.05	22 892.3	30H	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6d$	[4]	7/2	0.05	87HAN
4369.20	22 881.1	200H	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)6d$	[1]	1/2	0.05	87HAN
4372.46	22 864.00	2h	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.02	87HAN
4373.78	22 857.1	100H	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.05	87HAN
4379.44	22 827.56	10Hl	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.02	87HAN
4384.93	22 798.98	60	$5s5p^6$	^2S	1/2	–	$5p^4(^3P_2)6p$	[1]°	1/2	0.01	87HAN
4392.09	22 761.8	0	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.05	83BER
4393.20	22 756.1	500H	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.05	87HAN
4395.77	22 742.8	500H	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^1D_2)6d$	[4]	9/2	0.05	87HAN
4404.54	22 697.5	1	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)5g$	[2]	5/2	0.05	83BER
4406.88	22 685.4	200H	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.05	87HAN
4414.84	22 644.52	300*	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^1D_2)6d$	[4]	7/2	0.01	87HAN
4414.84	22 644.52	300*	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
4416.07	22 638.2	150H	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.05	87HAN
4427.52	22 579.67	2h	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.02	87HAN
4440.95	22 511.4	50H	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.05	87HAN
4448.13	22 475.0	500H	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[3]	7/2	0.05	87HAN
4451.32	22 458.9	1H	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)6d$	[1]	1/2	0.05	87HAN
4462.19	22 404.2	1000	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6d$	[4]	9/2	0.05	87HAN
4464.60	22 392.14	1^	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
4465.77	22 386.3		$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_1)5g$	[4]	9/2	0.05	87HAN
4470.90	22 360.59	30	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
4480.86	22 310.88	500H	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.02	87HAN
4485.95	22 285.57	20	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
4488.60	22 272.4	4H	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.05	87HAN
4488.97	22 270.6	0	$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_1)5g$	[3]	7/2	0.05	83BER
4507.11	22 180.95	5h	$5p^4(^1D_2)5d$	[1]	1/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.02	87HAN
4508.97	22 171.8	0a	$5p^4(^3P_2)4f$	[3]°	5/2	–	$5p^4(^3P_1)5g$	[4]	7/2	0.05	83BER
4521.86	22 108.59	100h	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.02	87HAN
4524.21	22 097.11	200	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
4532.49	22 056.74	200	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
4535.09	22 044.10	1h	$5p^4(^3P_2)7p$	[1]°	3/2	–	$5p^4(^3P_1)5g$	[3]	5/2	0.02	87HAN
4536.92	22 035.2	80H*	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)6d$	[2]	3/2	0.05	87HAN
4536.92	22 035.2	80H*	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)6d$	[2]	5/2	0.05	87HAN
4540.89	22 015.94	400h	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.02	87HAN
4545.23	21 994.9	400H	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)6d$	[3]	7/2	0.05	87HAN
4550.79	21 968.05	10H	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.02	87HAN
4550.91	21 967.5	2b	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.05	83BER
4555.94	21 943.2	200H	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[0]	1/2	0.05	87HAN
4563.00	21 909.3	2H	$5p^4(^3P_2)6d$	[3]	7/2	–	$5p^4(^1D_2)4f$	[4]°	9/2	0.05	87HAN
4567.91	21 885.7		$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.05	87HAN
4571.85	21 866.9	30Hd	$5p^4(^1D_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)6d$	[2]	3/2	0.05	87HAN
4577.06	21 842.0	200H	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6d$	[2]	5/2	0.05	87HAN
4580.70	21 824.6	80Hl	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)6d$	[2]	5/2	0.05	87HAN
4585.48	21 801.86	500H	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)6d$	[3]	7/2	0.02	87HAN
4591.80	21 771.9	1	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.05	83BER
4592.05	21 770.67	300H	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)6d$	[3]	7/2	0.02	87HAN
4593.70	21 762.85	6	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
4596.30	21 750.54	1	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
4603.03	21 718.74	600h	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
4615.06	21 662.12	100h	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)6d$	[3]	5/2	0.02	87HAN
4615.50	21 660.06	200*	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.01	87HAN
4615.50	21 660.06	200*	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
4617.50	21 650.68	90hl	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.01	87HAN
4619.57	21 640.97	1*	$5p^4(^1D_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)6d$	[1]	1/2	0.01	87HAN
4619.57	21 640.97	1*	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
4629.99	21 592.3	5*	$5p^4(^3P_2)7p$	[3]°	5/2	–	$5p^4(^3P_1)5g$	[3]	7/2	0.05	83BER
4629.99	21 592.3	5*	$5p^4(^3P_2)7p$	[3]°	5/2	–	$5p^4(^3P_1)5g$	[3]	5/2	0.05	83BER
4633.30	21 576.85	50	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4651.94	21 490.39	200	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
4653.00	21 485.50	40	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
4655.33	21 474.7		$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_1)5g$	[5]	11/2	0.05	87HAN
4666.28	21 424.35	40Hl	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.02	87HAN
4668.49	21 414.21	100	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
4672.20	21 397.20	100H	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.02	87HAN
4673.94	21 389.2	1w	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[4]	9/2	0.05	83BER
4674.56	21 386.40	40	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
4675.42	21 382.5	3	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.05	83BER
4676.46	21 377.7	200H	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)6d$	[3]	5/2	0.05	87HAN
4676.75	21 376.39	2	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.01	87HAN
4678.31	21 369.26	2h	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.02	87HAN
4679.45	21 364.05	3hl	$5p^4(^1D_2)5d$	[1]	1/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
4681.65	21 354.0	1w	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_1)5g$	[5]	11/2	0.05	83BER
4685.86	21 334.8	0	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_1)5g$	[3]	7/2	0.05	83BER
4688.20	21 324.2		$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_1)5g$	[4]	7/2	0.05	87HAN
4692.05	21 306.7	1b	$5p^4(^3P_2)6d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[4]°	9/2	0.05	83BER
4693.34	21 300.83	15hl	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.02	87HAN
4698.01	21 279.65	300h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.01	87HAN
4699.62	21 272.36	3Hl	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.02	87HAN
4704.67	21 249.5	10Hl	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.05	87HAN
4708.92	21 230.35	8hl	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.02	87HAN
4712.63	21 213.64	40	$5p^4(^1D_2)5d$	[1]	1/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.01	87HAN
4713.76	21 208.6	0*	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_1)5g$	[3]	7/2	0.05	83BER
4713.76	21 208.6	0*	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_1)5g$	[3]	5/2	0.05	83BER
4715.18	21 202.17	100	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
4721.00	21 176.0	2Hl	$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_2)7g$	[5]	11/2	0.05	87HAN
4731.19	21 130.42	100h	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.02	87HAN
4732.51	21 124.53	15Hl	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.02	87HAN
4769.05	20 962.68	150	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
4773.19	20 944.49	80h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.01	87HAN
4775.18	20 935.8	5Hl	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	87HAN
4775.76	20 933.2	8Hl	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.05	87HAN
4779.18	20 918.24	80	$5s5p^6$	^{2}S	1/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.01	87HAN
4786.65	20 885.60	10Hl	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.02	87HAN
4787.77	20 880.71	100	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
4791.84	20 862.98	2h^	$5p^4(^1S_0)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.02	87HAN
4792.56	20 859.84	40	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
4795.40	20 847.49	3h^	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
4796.48	20 842.8	6Hl	$5p^4(^1D_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)6d$	[1]	3/2	0.05	87HAN
4798.35	20 834.7	1a	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[4]°	7/2	0.05	83BER
4799.45	20 829.90	15Hl	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.02	87HAN
4802.10	20 818.40	1	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[4]°	9/2	0.01	87HAN
4817.14	20 753.41	40Hl	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.02	87HAN
4818.02	20 749.62	200	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
4823.35	20 726.69	300h	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^3P_2)7s$	[2]	5/2	0.01	87HAN
4830.25	20 697.08	2H	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.01	87HAN
4831.08	20 693.5	2b	$5p^4(^3P_2)6d$	[3]	7/2	–	$5p^4(^1D_2)4f$	[5]°	9/2	0.05	83BER
4832.20	20 688.73	2	$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.01	87HAN
4840.87	20 651.67	1*	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.01	87HAN
4840.87	20 651.67	1*	$5p^4(^1S_0)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.01	87HAN
4841.85	20 647.5	1b	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[3]°	7/2	0.05	83BER
4844.33	20 636.92	2000	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)6p$	[3]°	7/2	0.01	87HAN
4847.82	20 622.1	3	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.05	83BER
4850.2	20 611.95	2h^*	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_0)5g$	[4]	9/2	0.02	87HAN
4850.2	20 611.95	2h^*	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_0)5g$	[4]	7/2	0.02	87HAN
4853.77	20 596.79	40	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
4862.45	20 560.02	800h	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)7s$	[2]	5/2	0.01	87HAN
4868.87	20 532.91	1h	$5p^4(^1S_0)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.02	87HAN
4876.50	20 500.79	500h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4883.53	20 471.27	600h	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
4884.15	20 468.7	100H	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.05	87HAN
4887.30	20 455.48	300h	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
4890.09	20 443.81	300h*	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
4890.09	20 443.81	300h*	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.01	87HAN
4892.18	20 435.08	2^	$5p^4(^3P_2)4f$	[3]°	5/2	–	$5p^4(^3P_0)5g$	[4]	7/2	0.01	87HAN
4899.9	20 402.88	1^	$5p^4(^1D_2)5d$	[0]	1/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.01	87HAN
4905.20	20 380.84	2H	$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_2)7g$	[6]	13/2	0.02	87HAN
4919.66	20 320.93	200	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
4921.48	20 313.42	800	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
4934.3	20 260.6	1	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_2)7g$	[6]	11/2	0.1	87HAN
4965.00	20 135.4	4Hl	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	87HAN
4971.71	20 108.2	200H	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[1]°	3/2	0.05	87HAN
4972.71	20 104.15	400h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
4974.41	20 097.28	1^	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.01	87HAN
4974.87	20 095.42	2h	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.02	87HAN
4987.95	20 042.72	0	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.01	93GAL
4988.77	20 039.43	300h	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
4991.17	20 029.8	100H	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.05	87HAN
4993.03	20 022.33	10	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
4993.93	20 018.7	5Hl	$5p^4(^3P_2)6d$	[4]	9/2	–	$5p^4(^1D_2)4f$	[5]°	11/2	0.05	87HAN
5001.01	19 990.38	3h	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.02	87HAN
5012.83	19 943.25	50Hl	$5p^4(^1S_0)6s$	[0]	1/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.02	87HAN
5017.41	19 925.04	1	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
5018.75	19 919.72	1^	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
5036.15	19 850.90	3Hl	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.02	87HAN
5040.06	19 835.50	0b	$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_0)5g$	[4]	9/2	0.05	83BER
5044.92	19 816.39	150h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	1/2	0.01	87HAN
5052.54	19 786.51	30h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.01	87HAN
5066.33	19 732.65	3Hl	$5p^4(^3P_2)6d$	[4]	9/2	–	$5p^4(^3P_2)6f$	[5]°	9/2	0.05	87HAN
5069.82	19 719.07	10Hw	$5p^4(^3P_2)6d$	[4]	9/2	–	$5p^4(^3P_2)6f$	[5]°	11/2	0.05	87HAN
5073.8	19 703.6	1h^	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.1	87HAN
5080.62	19 677.15	600h	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.01	87HAN
5081.07	19 675.41	30	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
5091.93	19 633.45	60Hl	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.01	87HAN
5099.59	19 603.96	5H	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^1D_2)4f$	[5]°	9/2	0.05	87HAN
5104.0	19 587.0	1Hw*	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_0)5g$	[4]	9/2	0.1	87HAN
5104.0	19 587.0	1Hw*	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_0)5g$	[4]	7/2	0.1	87HAN
5108.58	19 569.46	2h	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.02	87HAN
5122.42	19 516.58	200h	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.01	87HAN
5125.70	19 504.10	30	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
5164.7	19 356.8	1H-	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.1	87HAN
5178.82	19 304.04	50h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
5182.25	19 291.26	0	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[3]	7/2	0.01	93GAL
5184.48	19 282.97	50	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
5188.04	19 269.74	200	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
5191.37	19 257.38	300	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
5192.10	19 254.67	80	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.01	87HAN
5194.92	19 244.22	5H	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^3P_2)6f$	[5]°	9/2	0.05	87HAN
5199.9	19 225.79	1h^	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.02	87HAN
5201.42	19 220.17	20	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
5201.88	19 218.47	10H	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
5213.17	19 176.85	1h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.02	87HAN
5218.20	19 158.36	1H	$5p^4(^1S_0)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.05	87HAN
5226.57	19 127.68	20hl	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.02	87HAN
5226.90	19 126.47	10hl	$5p^4(^1S_0)6s$	[0]	1/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
5247.75	19 050.48	20h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[5]°	9/2	0.01	87HAN
5259.89	19 006.51	30	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^3P_2)7s$	[2]	5/2	0.01	87HAN
5260.44	19 004.53	200	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
5261.95	18 999.07	200	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5268.31	18 976.14	50*	$5p^4(^1S_0)6s$	[0]	1/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.01	87HAN
5268.31	18 976.14	50*	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
5282.46	18 925.31	2h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[2]	3/2	0.01	87HAN
5291.3	18 893.69	2h	$5p^4(^1S_0)5d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.02	87HAN
5292.22	18 890.41	1000	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.01	87HAN
5309.27	18 829.74	200	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
5313.87	18 813.44	800	$5p^4(^3P_2)6p$	[3]°	7/2	–	$5p^4(^3P_2)7s$	[2]	5/2	0.01	87HAN
5319.83	18 792.37	3^	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.01	87HAN
5327.83	18 764.15	3	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[2]	5/2	0.01	87HAN
5339.33	18 723.73	1000	$5p^4(^3P_2)6s$	[2]	5/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.01	87HAN
5363.20	18 640.40	150	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
5368.07	18 623.49	100	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
5372.39	18 608.51	300	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)6p$	[1]°	1/2	0.01	87HAN
5415.36	18 460.86	50H^	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.05	87HAN
5419.15	18 447.95	2000	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.01	87HAN
5428.07	18 417.63	2hs^	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.02	87HAN
5438.96	18 380.76	400	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
5445.45	18 358.85	150	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_1)7s$	[1]	1/2	0.01	87HAN
5450.45	18 342.01	100	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
5450.90	18 340.50	20	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
5460.39	18 308.62	300	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)6p$	[3]°	7/2	0.01	87HAN
5469.54	18 277.99	20h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)5d$	[0]	1/2	0.01	87HAN
5472.61	18 267.74	500	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)6p$	[3]°	7/2	0.01	87HAN
5481.13	18 239.35	1h	$5p^4(^1S_0)5d$	[2]	3/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.02	87HAN
5507.46	18 152.15	2h	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[3]°	7/2	0.01	87HAN
5518.56	18 115.64	1	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.01	87HAN
5518.77	18 114.95	1	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^3P_2)4f$	[4]°	9/2	0.01	87HAN
5525.53	18 092.79	50	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.01	87HAN
5531.07	18 074.66	400	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.01	87HAN
5551.50	18 008.15	4Hs^	$5p^4(^3P_2)6d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.05	87HAN
5570.91	17 945.41	1	$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_2)6g$	[6]	11/2	0.05	83BER
5572.19	17 941.28	50	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
5583.5	17 904.94	2H	$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_2)6g$	[5]	11/2	0.05	87HAN
5591.61	17 878.97	2H	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	87HAN
5594.87	17 868.56	15Hw	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_2)6g$	[5]	9/2	0.05	87HAN
5612.89	17 811.19	1h-	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.02	87HAN
5616.67	17 799.20	150	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
5624.78	17 773.54	1Hl*	$5p^4(^3P_2)7p$	[2]°	5/2	–	$5p^4(^3P_2)6g$	[3]	5/2	0.05	87HAN
5624.78	17 773.54	1Hl*	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.05	87HAN
5633.24	17 746.85	3H	$5p^4(^3P_2)7p$	[2]°	5/2	–	$5p^4(^3P_2)6g$	[4]	7/2	0.05	87HAN
5650.53	17 692.54	1h	$5p^4(^3P_2)4f$	[3]°	5/2	–	$5p^4(^3P_2)6g$	[4]	7/2	0.02	87HAN
5659.38	17 664.88	150	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
5667.56	17 639.38	300	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)6p$	[1]°	1/2	0.01	87HAN
5670.91	17 628.96	50	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.01	87HAN
5675.15	17 615.79	1	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
5681.87	17 594.96	1h	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.02	87HAN
5686.49	17 580.66	2h	$5p^4(^3P_2)6d$	[1]	3/2	–	$5p^4(^1D_2)4f$	[3]°	5/2	0.02	87HAN
5688.20	17 575.38	2^	$5p^4(^3P_2)6d$	[0]	1/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.01	87HAN
5699.61	17 540.19	100	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
5716.10	17 489.59	100H	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)7s$	[2]	5/2	0.01	87HAN
5719.61	17 478.86	200	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.01	87HAN
5726.91	17 456.58	200	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
5730.56	17 445.46	0	$5p^4(^3P_2)7p$	[3]°	5/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.05	83BER
5744.2	17 404.0	1^	$5p^4(^3P_2)4f$	[2]°	3/2	–	$5p^4(^3P_2)6g$	[3]	5/2	0.1	87HAN
5751.03	17 383.37	200	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
5752.56	17 378.74	10	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
5758.65	17 360.37	100	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
5776.39	17 307.05	100	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
5780.83	17 293.76	1-	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
5791.88	17 260.76	1hl	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.02	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5809.5	17 208.41	1Hw	$5p^4(^3P_2)6d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.05	87HAN
5815.96	17 189.30	50	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
5821.57	17 172.74	1-	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
5824.79	17 163.24	1-	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.01	87HAN
5835.5	17 131.74	5Hw	$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_2)6g$	[6]	13/2	0.05	87HAN
5849.28	17 091.38	0	$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_2)6g$	[5]	11/2	0.05	83BER
5855.47	17 073.32	1	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.01	87HAN
5859.47	17 061.66	2H	$5p^4(^1D_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)7s$	[2]	3/2	0.05	87HAN
5877.25	17 010.05	1-	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_2)6g$	[6]	11/2	0.01	87HAN
5889.82	16 973.74	4	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_2)6g$	[4]	9/2	0.05	83BER
5890.26	16 972.48	0	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_2)6g$	[4]	7/2	0.01	93GAL
5891.70	16 968.33	4	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_2)6g$	[5]	11/2	0.05	83BER
5893.29	16 963.75	150	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
5905.13	16 929.74	200	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
5909.67	16 916.73	30h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.02	87HAN
5912.80	16 907.78	5h	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
5913.32	16 906.29	1	$5p^4(^3P_2)4f$	[1]°	1/2	–	$5p^4(^3P_1)8s$	[1]	3/2	0.01	93GAL
5917.44	16 894.52	50	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.01	87HAN
5921.50	16 882.93	1	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.01	87HAN
5928.15	16 864.00	3H^	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.05	87HAN
5934.14	16 846.97	2	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_2)6g$	[4]	9/2	0.01	87HAN
5934.55	16 845.81	1H	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_2)6g$	[4]	7/2	0.05	87HAN
5934.99	16 844.56	0	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_2)6g$	[5]	9/2	0.01	93GAL
5945.53	16 814.70	300	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_2)6p$	[1]°	1/2	0.01	87HAN
5958.03	16 779.42	50	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
5964.52	16 761.17	1-	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.01	87HAN
5971.13	16 742.61	200	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
5973.0	16 737.4	1h	$5p^4(^3P_2)6d$	[0]	1/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.1	87HAN
5976.46	16 727.68	1000	$5p^4(^3P_2)6s$	[2]	3/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.01	87HAN
5979.2	16 720.0	1H	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_1)6d$	[3]	7/2	0.1	87HAN
5988.44	16 694.22	1	$5p^4(^3P_2)4f$	[2]°	5/2	–	$5p^4(^3P_2)6g$	[3]	7/2	0.01	87HAN
5991.86	16 684.69	1H	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[2]°	3/2	0.02	87HAN
5998.3	16 666.8	1^	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.1	87HAN
5998.67	16 665.75	0b	$5p^4(^3P_2)4f$	[2]°	5/2	–	$5p^4(^3P_2)6g$	[4]	7/2	0.01	93GAL
6000.3	16 661.2	1-	$5p^4(^3P_2)6d$	[1]	3/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.1	87HAN
6008.92	16 637.32	100	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
6024.14	16 595.28	2^	$5p^4(^3P_2)6d$	[1]	3/2	–	$5p^4(^1D_2)4f$	[2]°	5/2	0.01	87HAN
6024.58	16 594.07	3H	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_0)7s$	[0]	1/2	0.02	87HAN
6036.20	16 562.13	500	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.01	87HAN
6048.53	16 528.37	5h^	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.02	87HAN
6051.15	16 521.21	1000	$5p^4(^3P_2)5d$	[3]	7/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.01	87HAN
6083.21	16 434.14	1h-	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.02	87HAN
6093.50	16 406.39	300	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.01	87HAN
6097.59	16 395.38	1000	$5p^4(^3P_2)5d$	[2]	5/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.01	87HAN
6101.43	16 385.06	200	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
6107.64	16 368.41	0	$5p^4(^3P_2)6d$	[3]	5/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.01	93GAL
6115.08	16 348.49	50	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
6127.44	16 315.51	2	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
6143.40	16 273.13	1h	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.02	87HAN
6146.45	16 265.05	50	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.01	87HAN
6155.28	16 241.72	1Hw-	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^3P_1)6d$	[2]	5/2	0.05	87HAN
6184.57	16 164.80	20	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
6185.03	16 163.60	15	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
6185.79	16 161.61	1H^	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
6194.07	16 140.01	300	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
6203.45	16 115.60	1h^	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.02	87HAN
6235.40	16 033.03	1h	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.02	87HAN
6255.32	15 981.97	2Hl^	$5p^4(^3P_1)6p$	[2]°	5/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.05	87HAN
6270.82	15 942.47	400	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
6277.54	15 925.40	300	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
6284.41	15 907.99	50	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
6296.39	15 877.73	10H^	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
6298.31	15 872.89	20	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
6300.86	15 866.46	100	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
6305.01	15 856.02	1h	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
6311.46	15 839.81	5Hw	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[3]	5/2	0.05	87HAN
6318.03	15 823.34	5	$5p^4(^3P_2)6d$	[1]	3/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.01	87HAN
6343.96	15 758.67	300	$5p^4(^3P_2)5d$	[2]	3/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.01	87HAN
6353.20	15 735.75	50Hl	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^3P_2)7s$	[2]	5/2	0.05	87HAN
6356.35	15 727.95	500	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_2)4f$	[4]°	7/2	0.01	87HAN
6375.28	15 681.25	100	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
6397.99	15 625.59	60	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
6418.58	15 575.46	20	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^1S_0)6s$	[0]	1/2	0.01	87HAN
6421.47	15 568.46	1^	$5p^4(^3P_2)6p$	[2]°	5/2	–	$5p^4(^1D_2)5d$	[2]	3/2	0.01	87HAN
6426.73	15 555.71	2H^	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)6d$	[1]	1/2	0.05	87HAN
6440.18	15 523.23	2H^	$5p^4(^1D_2)6p$	[3]°	7/2	–	$5p^4(^3P_1)6d$	[3]	7/2	0.05	87HAN
6442.3	15 518.12	1H^	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_0)6d$	[2]	5/2	0.05	87HAN
6461.48	15 472.05	10H^	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^3P_2)6d$	[0]	1/2	0.05	87HAN
6479.69	15 428.57	2H	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.05	87HAN
6483.97	15 418.39	0	$5p^4(^3P_0)7s$	[0]	1/2	–	$5p^4(^1D_2)4f$	[2]°	3/2	0.01	93GAL
6502.47	15 374.52	0	$5p^4(^3P_1)6p$	[0]°	1/2	–	$5p^4(^3P_2)6d$	[1]	1/2	0.05	83BER
6510.06	15 356.60	0	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.05	83BER
6512.28	15 351.36	0	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.05	83BER
6512.83	15 350.07	300h	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
6515.48	15 343.82	1H*	$5p^4(^1D_2)6p$	[1]°	1/2	–	$5p^4(^3P_1)6d$	[1]	3/2	0.05	87HAN
6515.48	15 343.82	1H*	$5p^4(^1D_2)5d$	[2]	5/2	–	$5p^4(^3P_2)7p$	[3]°	5/2	0.05	87HAN
6528.65	15 312.87	200h	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
6545.58	15 273.27	4w	$5p^4(^1D_2)6p$	[3]°	5/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.01	93GAL
6556.70	15 247.36	4	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
6563.19	15 232.29	15	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
6569.13	15 218.51	5	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)5d$	[1]	1/2	0.01	87HAN
6573.68	15 207.98	30	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
6595.01	15 158.79	800	$5p^4(^1D_2)5d$	[4]	9/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
6597.25	15 153.65	300	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
6598.84	15 149.99	80	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
6614.96	15 113.08	10H	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)4f$	[3]°	5/2	0.02	87HAN
6618.40	15 105.22	50	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
6619.33	15 103.10	3	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_2)8s$	[2]	5/2	0.05	83BER
6620.02	15 101.52	200h	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
6634.13	15 069.41	6Hl	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^3P_2)6d$	[1]	3/2	0.05	87HAN
6638.85	15 058.69	2h	$5p^4(^1D_2)5d$	[1]	3/2	–	$5p^4(^3P_2)7p$	[2]°	5/2	0.02	87HAN
6642.9	15 049.5	1h	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.1	87HAN
6663.1	15 003.9	2	$5p^4(^1D_2)6p$	[2]°	3/2	–	$5p^4(^3P_1)6d$	[3]	5/2	0.1	87HAN
6665.59	14 998.28	2	$5p^4(^3P_2)7s$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.01	87HAN
6691.22	14 940.83	1	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.01	87HAN
6694.32	14 933.91	400h	$5p^4(^3P_2)5d$	[1]	1/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.01	87HAN
6702.25	14 916.24	80	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.01	87HAN
6744.27	14 823.31	0	$5p^4(^1D_2)6p$	[1]°	1/2	–	$5p^4(^3P_2)8s$	[2]	3/2	0.05	83BER
6756.83	14 795.76	0	$5p^4(^3P_2)4f$	[3]°	5/2	–	$5p^4(^1D_2)6d$	[3]	7/2	0.01	93GAL
6788.71	14 726.27	100h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
6790.37	14 722.67	80h	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
6805.74	14 689.43	1000	$5p^4(^3P_1)5d$	[3]	7/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
6910.22	14 467.33	100	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
6990.88	14 300.41	2000	$5p^4(^3P_2)5d$	[4]	9/2	–	$5p^4(^3P_2)6p$	[3]°	7/2	0.01	87HAN
7003.96	14 273.70	50	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
7017.06	14 247.05	80	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
7052.57	14 175.32	3Hw	$5p^4(^3P_2)6d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.05	87HAN
7072.43	14 135.51	4Hw	$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[3]°	7/2	0.05	87HAN
7075.0	14 130.38	2Hs	$5p^4(^1D_2)5d$	[0]	1/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.1	87HAN
7082.15	14 116.114	200	$5p^4(^3P_1)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
7094.7	14 091.14	1Hw	$5p^4(^3P_2)6d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[3]°	5/2	0.1	87HAN
7100.8	14 079.04	5h^	$5p^4(^3P_0)6p$	[1]°	3/2	–	$5p^4(^3P_2)6d$	[2]	3/2	0.02	87HAN
7133.27	14 014.953	10	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)5d$	[2]	3/2	0.01	87HAN
7147.50	13 987.05	100H	$5p^4(^3P_2)6d$	[4]	9/2	–	$5p^4(^3P_2)5f$	[5]°	11/2	0.05	87HAN
7149.03	13 984.057	300h	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.01	87HAN
7164.83	13 953.219	800h	$5p^4(^1D_2)5d$	[4]	7/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.01	87HAN
7215.97	13 854.33	20h	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)5d$	[2]	3/2	0.02	87HAN
7245.38	13 798.10	2h	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.02	87HAN
7258.6	13 772.97	2H*	$5p^4(^3P_1)6p$	[1]°	3/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.1	87HAN
7258.6	13 772.97	2H*	$5p^4(^3P_2)6d$	[3]	7/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.1	87HAN
7279.75	13 732.95	4Hws*	$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.05	87HAN
7279.75	13 732.95	4Hws*	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[2]	3/2	0.05	87HAN
7284.34	13 724.298	100	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.01	87HAN
7301.80	13 691.481	200	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.01	87HAN
7339.30	13 621.52	300h	$5p^4(^3P_0)5d$	[2]	5/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.02	87HAN
7343.37	13 613.98	30Hw	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^3P_2)5f$	[5]°	9/2	0.05	87HAN
7378.38	13 549.378	30	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.01	87HAN
7400.5	13 508.88	4h	$5p^4(^3P_1)6s$	[1]	1/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.1	87HAN
7410.14	13 491.31	4Hw	$5p^4(^3P_1)6p$	[1]°	1/2	–	$5p^4(^1S_0)5d$	[2]	3/2	0.05	87HAN
7458.0	13 404.73	2H	$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^3P_1)4f$	[2]°	5/2	0.1	87HAN
7472.0	13 379.61	1-	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_1)6d$	[3]	7/2	0.1	87HAN
7495.36	13 337.914	50	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)5d$	[1]	1/2	0.01	87HAN
7503.00	13 324.33	3h	$5p^4(^1D_2)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.02	87HAN
7508.6	13 314.40	1H*	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^1S_0)5d$	[2]	5/2	0.05	87HAN
7508.6	13 314.40	1H*	$5p^4(^1D_2)5d$	[0]	1/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.05	87HAN
7530.70	13 275.323	50	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_1)6p$	[0]°	1/2	0.01	87HAN
7548.45	13 244.106	300	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.01	87HAN
7594.6	13 163.63	1H	$5p^4(^1D_2)5d$	[0]	1/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.1	87HAN
7618.57	13 122.210	100	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
7670.66	13 033.101	200	$5p^4(^3P_0)5d$	[2]	3/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.01	87HAN
7712.42	12 962.531	30	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.01	87HAN
7772.12	12 862.96	20hl	$5p^4(^3P_1)4f$	[2]°	3/2	–	$5p^4(^3P_1)5g$	[3]	5/2	0.02	87HAN
7787.04	12 838.317	100	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[2]°	3/2	0.01	87HAN
7805.8	12 807.46	1	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.1	87HAN
7826.1	12 774.24	2	$5p^4(^3P_0)6p$	[1]°	1/2	–	$5p^4(^3P_2)7s$	[2]	3/2	0.1	87HAN
7862.7	12 714.78	3	$5p^4(^1D_2)6p$	[1]°	3/2	–	$5p^4(^3P_1)7s$	[1]	3/2	0.1	87HAN
7882.71	12 682.503	20*	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	5/2	0.01	87HAN
7882.71	12 682.503	20*	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^3P_1)4f$	[4]°	7/2	0.01	87HAN
7889.4	12 671.75	50h	$5p^4(^3P_1)4f$	[4]°	9/2	–	$5p^4(^3P_1)5g$	[5]	11/2	0.02	87HAN
7892.6	12 666.61	8h	$5p^4(^3P_2)6d$	[2]	3/2	–	$5p^4(^3P_1)4f$	[2]°	3/2	0.02	87HAN
7897.7	12 658.43	5Hs	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[1]°	1/2	0.1	87HAN
7920.48	12 622.03	10Hw	$5p^4(^1S_0)5d$	[2]	5/2	–	$5p^4(^1S_0)6p$	[1]°	3/2	0.05	87HAN
7976.4	12 533.54	3Hw*	$5p^4(^3P_1)7s$	[1]	1/2	–	$5p^4(^1D_2)4f$	[1]°	3/2	0.1	87HAN
7976.4	12 533.54	3Hw*	$5p^4(^3P_1)5d$	[1]	1/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.1	87HAN
7987.99	12 515.352	40	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)6p$	[1]°	1/2	0.01	87HAN
7991.5	12 509.85	5H*	$5p^4(^3P_1)5d$	[1]	3/2	–	$5p^4(^3P_0)6p$	[1]°	1/2	0.1	87HAN
7991.5	12 509.85	5H*	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)5d$	[2]	5/2	0.1	87HAN
8001.95	12 493.52	10hs	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[3]	7/2	0.02	87HAN
8005.8	12 487.51	2	$5p^4(^1D_2)5d$	[1]	1/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.1	87HAN
8008.45	12 483.38	300h	$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_2)5g$	[5]	11/2	0.02	87HAN
8014.26	12 474.33	50hs	$5p^4(^3P_2)4f$	[4]°	9/2	–	$5p^4(^3P_2)5g$	[5]	9/2	0.02	87HAN
8020.07	12 465.291	5	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1S_0)6s$	[0]	1/2	0.01	87HAN
8031.64	12 447.33	100h	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[4]	9/2	0.02	87HAN
8035.40	12 441.51	20h	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.02	87HAN
8038.26	12 437.08	100h	$5p^4(^3P_2)4f$	[3]°	7/2	–	$5p^4(^3P_2)5g$	[5]	9/2	0.02	87HAN
8080.31	12 372.36	50hs	$5p^4(^3P_2)7p$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[3]	5/2	0.02	87HAN
8115.94	12 318.04	50h*	$5p^4(^3P_2)4f$	[3]°	5/2	–	$5p^4(^3P_2)5g$	[3]	5/2	0.02	87HAN
8115.94	12 318.04	50h*	$5p^4(^3P_2)7p$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.02	87HAN
8136.83	12 286.42	30h	$5p^4(^3P_1)4f$	[2]°	5/2	–	$5p^4(^3P_1)5g$	[3]	7/2	0.02	87HAN
8142.6	12 277.71	5H	$5p^4(^3P_2)6p$	[2]°	3/2	–	$5p^4(^1D_2)5d$	[1]	3/2	0.1	87HAN

Spectral lines of Xe II—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
8151.80	12 263.857	100	$5p^4(^3P_2)4f$	[3]°	5/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.01	87HAN
8214.85	12 169.731	20	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)6p$	[3]°	7/2	0.01	87HAN
8262.73	12 099.21	30h	$5p^4(^3P_0)4f$	[3]°	5/2	–	$5p^4(^3P_0)5g$	[4]	7/2	0.02	87HAN
8285.70	12 065.67	15h	$5p^4(^1D_2)6s$	[2]	5/2	–	$5p^4(^3P_0)6p$	[1]°	3/2	0.02	87HAN
8297.55	12 048.44	100h	$5p^4(^3P_0)4f$	[3]°	7/2	–	$5p^4(^3P_0)5g$	[4]	9/2	0.02	87HAN
8316.2	12 021.42	10Hw	$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	7/2	0.1	87HAN
8329.44	12 002.31	30Hw	$5p^4(^3P_2)4f$	[2]°	3/2	–	$5p^4(^3P_2)5g$	[3]	5/2	0.05	87HAN
8339.1	11 988.41	1	$5p^4(^3P_2)6d$	[4]	7/2	–	$5p^4(^3P_1)4f$	[4]°	9/2	0.1	87HAN
8347.24	11 976.716	100	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.01	87HAN
8351.3	11 970.89	3*	$5p^4(^1D_2)5d$	[2]	3/2	–	$5p^4(^3P_2)4f$	[2]°	3/2	0.1	87HAN
8351.3	11 970.89	3*	$5p^4(^3P_2)6d$	[2]	5/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.1	87HAN
8378.3	11 932.32	5h	$5p^4(^1D_2)6p$	[2]°	5/2	–	$5p^4(^3P_0)6d$	[2]	3/2	0.1	87HAN
8465.7	11 809.13	2h	$5p^4(^3P_2)6d$	[2]	3/2	–	$5p^4(^3P_0)4f$	[3]°	5/2	0.1	87HAN
8467.8	11 806.20	1-	$5p^4(^3P_1)6p$	[2]°	3/2	–	$5p^4(^1D_2)5d$	[0]	1/2	0.1	87HAN
8482.64	11 785.54	5h	$5p^4(^3P_1)5d$	[2]	3/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.02	87HAN
8515.19	11 740.49	50Hw	$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_2)5g$	[6]	13/2	0.05	87HAN
8565.1	11 672.08	1h	$5p^4(^3P_1)4f$	[3]°	7/2	–	$5p^4(^3P_1)5g$	[4]	9/2	0.1	87HAN
8566.7	11 669.90	2h	$5p^4(^3P_2)4f$	[5]°	11/2	–	$5p^4(^3P_2)5g$	[5]	11/2	0.1	87HAN
8584.0	11 646.38	1	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	1/2	0.1	87HAN
8604.23	11 619.00	50Hw	$5p^4(^3P_2)4f$	[5]°	9/2	–	$5p^4(^3P_2)5g$	[6]	11/2	0.05	87HAN
8628.94	11 585.73	25h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.02	87HAN
8716.19	11 469.75	50h	$5p^4(^3P_2)5d$	[1]	3/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.02	87HAN
8752.14	11 422.64	7H	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_2)5g$	[4]	9/2	0.05	87HAN
8760.14	11 412.21	6H	$5p^4(^3P_2)4f$	[4]°	7/2	–	$5p^4(^3P_2)5g$	[5]	9/2	0.05	87HAN
8785.88	11 378.77	4Hw	$5p^4(^3P_2)4f$	[1]°	1/2	–	$5p^4(^3P_2)5g$	[2]	3/2	0.05	87HAN
8796.92	11 364.49	2h	$5p^4(^1D_2)6s$	[2]	3/2	–	$5p^4(^3P_1)6p$	[1]°	3/2	0.02	87HAN
8804.61	11 354.568	30*	$5p^4(^3P_2)4f$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[2]	5/2	0.01	87HAN
8804.61	11 354.568	30*	$5p^4(^1D_2)5d$	[3]	7/2	–	$5p^4(^1D_2)6p$	[2]°	5/2	0.01	87HAN
8855.74	11 289.01	5H	$5p^4(^3P_2)4f$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[3]	7/2	0.05	87HAN
8896.7	11 237.04	1h-	$5p^4(^3P_2)4f$	[2]°	5/2	–	$5p^4(^3P_2)5g$	[4]	7/2	0.1	87HAN
8902.66	11 229.51	5H	$5p^4(^3P_2)4f$	[1]°	3/2	–	$5p^4(^3P_2)5g$	[2]	5/2	0.05	87HAN
9017.8	11 086.14	1	$5p^4(^1S_0)6s$	[0]	1/2	–	$5p^4(^3P_2)4f$	[1]°	3/2	0.1	87HAN
9106.24	10 978.468	1	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[3]°	7/2	0.01	87HAN
9193.8	10 873.91	2h	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)6p$	[1]°	1/2	0.1	87HAN
9226.39	10 835.50	7h	$5p^4(^3P_2)5d$	[0]	1/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.02	87HAN
9259.60	10 796.64	1h	$5p^4(^3P_1)6d$	[2]	5/2	–	$5p^4(^1D_2)4f$	[3]°	7/2	0.02	87HAN
9265.67	10 789.57	10h	$5p^4(^3P_2)6p$	[3]°	5/2	–	$5p^4(^1D_2)5d$	[2]	5/2	0.02	87HAN
9288.4	10 763.16	5H	$5p^4(^1S_0)6s$	[0]	1/2	–	$5p^4(^3P_2)7p$	[1]°	1/2	0.1	87HAN
9304.77	10 744.23	1h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)5d$	[2]	3/2	0.02	87HAN
9331.67	10 713.26	4h	$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)6p$	[3]°	5/2	0.02	87HAN
9400.59	10 634.71	15h	$5p^4(^3P_0)6s$	[0]	1/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.02	87HAN
9447.6	10 581.80	1	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[1]°	3/2	0.1	87HAN
9475.23	10 550.94	3h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	3/2	0.02	87HAN
9591.35	10 423.20	50h	$5p^4(^3P_2)5d$	[4]	7/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.02	87HAN
9604.50	10 408.93	7h	$5p^4(^3P_1)5d$	[2]	5/2	–	$5p^4(^3P_1)6p$	[2]°	5/2	0.02	87HAN
9615.71	10 396.80	4h	$5p^4(^3P_2)6p$	[1]°	1/2	–	$5p^4(^1D_2)5d$	[1]	3/2	0.02	87HAN
9671.6	10 336.72	1h-	$5p^4(^3P_1)4f$	[4]°	7/2	–	$5p^4(^3P_0)5g$	[4]	7/2	0.1	87HAN
9698.68	10 307.85	50hl	$5p^4(^3P_2)5d$	[3]	5/2	–	$5p^4(^3P_2)6p$	[1]°	3/2	0.02	87HAN
9774.8	10 227.58	1h	$5p^4(^3P_2)6p$	[1]°	3/2	–	$5p^4(^1D_2)5d$	[1]	1/2	0.1	87HAN
9837.8	10 162.09	2h	$5p^4(^1S_0)5d$	[2]	3/2	–	$5p^4(^1S_0)6p$	[1]°	1/2	0.1	87HAN
10 220.8	9781.29	3h	$5p^4(^1D_2)5d$	[3]	5/2	–	$5p^4(^1D_2)6p$	[3]°	5/2	0.1	87HAN
10 914.31	9159.774		$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)6p$	[2]°	5/2	0.02	02ZIE
11 116.69	8993.021		$5p^4(^3P_1)6s$	[1]	3/2	–	$5p^4(^3P_2)6p$	[2]°	3/2	0.02	02ZIE

4.3. Xe III

Te isoelectronic sequence

Ground state

$1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10} 5s^2 5p^4\ ^3P_2$

Ionization energy 250 400±300 cm^{-1} (31.05±0.04 eV) [79GAL] [88PER]

A thorough analysis of the spectrum of doubly ionized xenon, Xe III, was published in 1988 by Persson *et al.* [88PER]. They obtained a set of energy levels, which we use here, from a list of Xe III lines they compiled from three sources. For wavelengths of 2000 Å and less, they made measurements at Lund using as the source of their lines either a dc hollow cathode discharge or a theta-pinch discharge. Quoted uncertainty for these measurements was 0.02 Å. For wavelengths greater than 2000 Å, they made measurements at La Plata using as the source of their lines a laser–tube-like source viewed end on. Quoted uncertainty for these measurements was 0.05 Å. Due to the energy of this source, some lines were seen which may not appear in conventional sources and some transitions may be subject to line shifts. In addition they included a few lines from the unpublished line list of Humphreys [81HUM] which contains published [36HUM], [36BOY], [39HUM] and unpublished lines fromHumphreys and from Boyce. These lines are indicated by parentheses around the stated intensity in our Xe III line table. We quote the wavelengths with the number of digits provided by Persson *et al.* [88PER] even if the quoted uncertainty is larger. Four lines (6359, 4289, 1402, and 1321 Å) are classified in Persson *et al.* [88PER] as $\Delta J = 2$ transitions which involve a parity change. Since this eliminates E1, E2, and M1 transitions, we have not included these lines. Nine lines in Persson *et al.* [88PER] are classified as transitions involving the $(^2P^\circ)6d\ ^3D_1^\circ$ level with an energy of 210 819.29 cm^{-1}. This level is not included in their table of odd parity levels but we include it here. Note that our calculation indicates that this level could, perhaps, be better designated as $(^2P^\circ)7s\ ^3P_1^\circ$ but we will use the [88PER] designation. Another analysis by Romeo y Bidegain *et al.* [98ROM] concludes that the $(^4S^\circ)4f\ ^5F_2$ and $^5F_3$ levels should be designated as $(^2D^\circ)6p\ ^3P_2$ and $^3D_3$, respectively, but here also we will use the designations of Persson *et al.* [88PER]. We have also corrected four misprints in their line list.

An additional source of lines for our line table came from Gallardo, Raineri, and Reyna Almandos [93GAL]. Their quoted uncertainty is 0.01 Å. They used a capillary pulsed discharge for wavelengths less than 2000 Å and laser–tube-like sources for wavelengths greater than 2000 Å. Comments above about the laser–tube-like sources apply to this work as well. Where duplicate lines appeared in both works, this data set was used in preference to that in [88PER]. 22 additional lines were added to our list from Humphreys's unpublished compilation [81HUM].

All candidate lines were passed through a program to determine if they correspond to a transition between the known Xe III levels. Only classifiable lines are included in our compilation.

Transition probability calculations using the Cowan codes [81COW] with empirically adjusted configuration average energies were used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references.

The intensity codes given in the Xe III line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
a	affected
b	blend
h	hazy
H	very hazy
u	unsymmetric
w	wide
*	two or more classifications of this line share the same intensity

The ionization energy was determined by isoelectronic comparisons by Gallardo *et al.* [79GAL] and confirmed by [88PER]. The values of g_J included in the Xe III level table were compiled by [58MOO] from the results reported by [39HUM].

References

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Energy levels of Xe III

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
0.00	0	$5s^25p^4$	^{3}P	2		88PER
8 130.08	0	$5s^25p^4$	^{3}P	0		88PER
9 794.36	0	$5s^25p^4$	^{3}P	1		88PER
17 098.73	0	$5s^25p^4$	^{1}D	2		88PER
36 102.94	0	$5s^25p^4$	^{1}S	0		88PER
98 262.47	1	$5s5p^5$	^{3}P°	2		88PER
103 568.20	1	$5s5p^5$	^{3}P°	1		88PER
108 333.76	1	$5s5p^5$	^{3}P°	0		88PER
163 527.40	1	$5s5p^5$	^{1}P°	1		88PER
111 605.41	1	$5s^25p^3(^4S°)5d$	^{5}D°	3		88PER
111 856.38	1	$5s^25p^3(^4S°)5d$	^{5}D°	2		88PER
112 271.78	1	$5s^25p^3(^4S°)5d$	^{5}D°	4		88PER
112 449.90	1	$5s^25p^3(^4S°)5d$	^{5}D°	1		88PER
112 693.95	1	$5s^25p^3(^4S°)5d$	^{5}D°	0		88PER
117 240.08	1	$5s^25p^3(^4S°)5d$	^{3}D°	2		88PER
119 026.03	1	$5s^25p^3(^2D°)5d$	^{1}P°	1		88PER
121 229.58	1	$5s^25p^3(^4S°)5d$	^{3}D°	3		88PER
121 922.75	1	$5s^25p^3(^4S°)5d$	^{3}D°	1		88PER
124 691.33	1	$5s^25p^3(^2D°)5d$	^{3}F°	2		88PER
126 119.77	1	$5s^25p^3(^2D°)5d$	^{3}F°	3		88PER
127 782.14	1	$5s^25p^3(^2D°)5d$	^{3}G°	4		88PER
128 349.15	1	$5s^25p^3(^2D°)5d$	^{3}G°	3		88PER
130 173.73	1	$5s^25p^3(^2D°)5d$	^{3}F°	4		88PER
132 159.94	1	$5s^25p^3(^2D°)5d$	^{3}G°	5		88PER
132 711.78	1	$5s^25p^3(^2D°)5d$	^{1}G°	4		88PER
133 234.01	1	$5s^25p^3(^2D°)5d$	^{3}D°	1	0.38	88PER
136 367.48	1	$5s^25p^3(^2P°)5d$	^{1}D°	2	0.90	88PER
140 437.79	1	$5s^25p^3(^2P°)5d$	^{3}P°	0		88PER
140 730.93	1	$5s^25p^3(^2P°)5d$	^{3}P°	1	1.56	88PER
142 064.27	1	$5s^25p^3(^2D°)5d$	^{3}D°	2	1.12	88PER
143 156.24	1	$5s^25p^3(^2D°)5d$	^{3}D°	3	1.22	88PER
145 300.13	1	$5s^25p^3(^2P°)5d$	^{3}F°	2	0.81	88PER
145 340.91	1	$5s^25p^3(^2P°)5d$	^{3}F°	3		88PER
147 797.41	1	$5s^25p^3(^2D°)5d$	^{3}S°	1		88PER
148 370.13	1	$5s^25p^3(^2D°)5d$	^{3}P°	2		88PER
148 412.84	1	$5s^25p^3(^2D°)5d$	^{1}F°	3		88PER
148 535.52	1	$5s^25p^3(^2P°)5d$	^{3}F°	4		88PER
150 404.24	1	$5s^25p^3(^2P°)5d$	^{3}P°	2		88PER
153 893.20	1	$5s^25p^3(^2P°)5d$	^{3}D°	2		88PER
154 639.37	1	$5s^25p^3(^2D°)5d$	^{3}P°	1		88PER
155 400.90	1	$5s^25p^3(^2P°)5d$	^{3}D°	1		88PER
156 392.68	1	$5s^25p^3(^2P°)5d$	^{3}D°	3		88PER
160 733.77	1	$5s^25p^3(^2D°)5d$	^{3}P°	0		88PER
161 809.98	1	$5s^25p^3(^2D°)5d$	^{1}D°	2		88PER
162 957.50	1	$5s^25p^3(^2P°)5d$	^{1}F°	3		88PER
175 052.36	1	$5s^25p^3(^2P°)5d$	^{1}P°	1		88PER
121 475.94	1	$5s^25p^3(^4S°)6s$	^{5}S°	2	1.95	88PER
125 617.06	1	$5s^25p^3(^4S°)6s$	^{3}S°	1	1.77	88PER
134 667.42	1	$5s^25p^3(^2D°)6s$	^{3}D°	2	1.18	88PER
138 145.49	1	$5s^25p^3(^2D°)6s$	^{3}D°	1	0.50	88PER
138 658.20	1	$5s^25p^3(^2D°)6s$	^{3}D°	3	1.33	88PER
143 048.20	1	$5s^25p^3(^2D°)6s$	^{1}D°	2	0.96	88PER
150 505.31	1	$5s^25p^3(^2P°)6s$	^{3}P°	0		88PER
151 482.43	1	$5s^25p^3(^2P°)6s$	^{3}P°	1	1.47	88PER
158 928.10	1	$5s^25p^3(^2P°)6s$	^{3}P°	2		88PER
159 388.18	1	$5s^25p^3(^2P°)6s$	^{1}P°	1		88PER
146 781.48	0	$5s^25p^3(^4S°)6p$	^{5}P	1	2.28	88PER
146 962.42	0	$5s^25p^3(^4S°)6p$	^{5}P	2	1.70	88PER
149 061.57	0	$5s^25p^3(^4S°)6p$	^{5}P	3	1.57	88PER
150 301.10	0	$5s^25p^3(^4S°)6p$	^{3}P	1	1.59	88PER
152 057.72	0	$5s^25p^3(^4S°)6p$	^{3}P	2	1.50	88PER

Energy levels of Xe III—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
152 808.17	0	$5s^25p^3(^4S^\circ)6p$	^3P	0		88PER
158 996.98	0	$5s^25p^3(^2D^\circ)6p$	^3D	1		88PER
160 691.30	0	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.84	88PER
162 259.97	0	$5s^25p^3(^2D^\circ)6p$	^3D	2	1.17	88PER
162 594.81	0	$5s^25p^3(^2D^\circ)6p$	^3F	3	1.08	88PER
164 438.64	0	$5s^25p^3(^2D^\circ)6p$	^1F	3	1.09	88PER
164 511.65	0	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.42	88PER
165 941.69	0	$5s^25p^3(^2D^\circ)6p$	^3P	0		88PER
166 554.82	0	$5s^25p^3(^2D^\circ)6p$	^3F	4	1.28	88PER
166 699.11	0	$5s^25p^3(^2D^\circ)6p$	^3D	3		88PER
167 066.32	0	$5s^25p^3(^2D^\circ)6p$	^3P	2		88PER
168 086.00	0	$5s^25p^3(^2D^\circ)6p$	^3P	1	1.30	88PER
171 989.82	0	$5s^25p^3(^2D^\circ)6p$	^1D	2	1.08	88PER
175 231.15	0	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.65	88PER
177 955.93	0	$5s^25p^3(^2P^\circ)6p$	^3D	2	1.18	88PER
178 029.33	0	$5s^25p^3(^2P^\circ)6p$	^3P	1	1.51	88PER
178 054.53	0	$5s^25p^3(^2P^\circ)6p$	^3P	0		88PER
182 134.14	0	$5s^25p^3(^2P^\circ)6p$	^3S	1		88PER
184 009.10	0	$5s^25p^3(^2P^\circ)6p$	^1D	2		88PER
184 594.45	0	$5s^25p^3(^2P^\circ)6p$	^3D	3		88PER
185 888.03	0	$5s^25p^3(^2P^\circ)6p$	^1P	1		88PER
186 320.88	0	$5s^25p^3(^2P^\circ)6p$	^3P	2		88PER
190 491.16	0	$5s^25p^3(^2P^\circ)6p$	^1S	0		88PER
166 355.27	0	$5s^25p^3(^4S^\circ)4f$	^5F	4	1.31	88PER
166 374.06	0	$5s^25p^3(^4S^\circ)4f$	^5F	3	1.22	88PER
166 743.80	0	$5s^25p^3(^4S^\circ)4f$	^5F	5		88PER
166 880.09	0	$5s^25p^3(^4S^\circ)4f$	^5F	2	1.38	88PER
167 173.54	0	$5s^25p^3(^4S^\circ)4f$	^5F	1		88PER
170 250.15	0	$5s^25p^3(^4S^\circ)4f$	^3F	3		88PER
173 734.12	0	$5s^25p^3(^4S^\circ)4f$	^3F	2		88PER
173 946.53	0	$5s^25p^3(^4S^\circ)4f$	^3F	4		88PER
178 306.08	0	$5s^25p^3(^2D^\circ)4f$	^3G	3		88PER
178 887.17	0	$5s^25p^3(^2D^\circ)4f$	^3G	4		88PER
181 356.80	0	$5s^25p^3(^2D^\circ)4f$	^3H	5		88PER
181 593.70	0	$5s^25p^3(^2D^\circ)4f$	^3F	2		88PER
181 684.94	0	$5s^25p^3(^2D^\circ)4f$	^3H	4		88PER
182 377.01	0	$5s^25p^3(^2D^\circ)4f$	^3D	3		88PER
183 472.95	0	$5s^25p^3(^2D^\circ)4f$	^1P	1		88PER
184 114.53	0	$5s^25p^3(^2D^\circ)4f$	^3G	5		88PER
185 406.74	0	$5s^25p^3(^2D^\circ)4f$	^3F	4		88PER
186 022.92	0	$5s^25p^3(^2D^\circ)4f$	^1H	5		88PER
186 086.52	0	$5s^25p^3(^2D^\circ)4f$	^3H	6		88PER
186 614.26	0	$5s^25p^3(^2D^\circ)4f$	^3F	3		88PER
186 992.43	0	$5s^25p^3(^2D^\circ)4f$	^3D	2		88PER
188 412.56	0	$5s^25p^3(^2D^\circ)4f$	^3P	2		88PER
188 792.52	0	$5s^25p^3(^2D^\circ)4f$	^3D	1		88PER
189 701.46	0	$5s^25p^3(^2D^\circ)4f$	^3P	1		88PER
189 778.94	0	$5s^25p^3(^2D^\circ)4f$	^1F	3		88PER
189 824.07	0	$5s^25p^3(^2D^\circ)4f$	^1D	2		88PER
192 425.21	0	$5s^25p^3(^2D^\circ)4f$	^1G	4		88PER
196 156.21	0	$5s^25p^3(^2P^\circ)4f$	^3F	3		88PER
197 254.25	0	$5s^25p^3(^2P^\circ)4f$	^3F	2		88PER
197 953.29	0	$5s^25p^3(^2P^\circ)4f$	^3G	3		88PER
203 359.91	0	$5s^25p^3(^2P^\circ)4f$	^3D	2		88PER
204 382.87	0	$5s^25p^3(^2P^\circ)4f$	^3D	3		88PER
204 904.40	0	$5s^25p^3(^2P^\circ)4f$	^1G	4		88PER
206 760.00	0	$5s^25p^3(^2P^\circ)4f$	^3F	4		88PER
182 337.88	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2		88PER
182 464.48	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3		88PER
182 521.94	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	0		88PER

Energy levels of Xe III—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	g_J	Source of level
182 551.32	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1		88PER
182 716.33	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4		88PER
185 120.90	1	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2		88PER
186 384.04	1	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3		88PER
186 589.15	1	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1		88PER
195 977.67	1	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2		88PER
196 261.50	1	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3		88PER
196 538.07	1	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4		88PER
196 608.91	1	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3		88PER
196 876.63	1	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1		88PER
197 090.86	1	$5s^25p^3(^2D^\circ)6d$	$^1S^\circ$	0		88PER
198 491.98	1	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2		88PER
199 104.12	1	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1		88PER
200 050.60	1	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4		88PER
200 425.68	1	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4		88PER
200 471.83	1	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5		88PER
200 650.23	1	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3		88PER
201 512.20	1	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2		88PER
201 618.48	1	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	0		88PER
202 035.68	1	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	1		88PER
202 805.90	1	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1		88PER
203 376.04	1	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2		88PER
203 845.36	1	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3		88PER
210 819.29	1	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1		88PER
182 482.74	1	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2		88PER
183 786.24	1	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1		88PER
195 907.04	1	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1		88PER
196 140.93	1	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2		88PER
200 033.45	1	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3		88PER
200 539.71	1	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2		88PER
197 310.57	0	$5s^25p^3(^4S^\circ)5f$	^5F	4		88PER
197 460.67	0	$5s^25p^3(^4S^\circ)5f$	^5F	5		88PER
197 585.82	0	$5s^25p^3(^4S^\circ)5f$	^5F	3		88PER
197 611.00	0	$5s^25p^3(^4S^\circ)5f$	^5F	1		88PER
197 860.38	0	$5s^25p^3(^4S^\circ)5f$	^5F	2		88PER
210 857.49	0	$5p^6$	^1S	0		88PER

Spectral lines of Xe III

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
490.579	203 841.	(−2)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.02	88PER
493.092	202 802.	(0)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.02	88PER
496.260	201 507.	(2)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.02	88PER
497.457	201 022.	(−2)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.02	88PER
498.378	200 651.	(2)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.02	88PER
499.923	200 031.	(0)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.02	88PER
503.802	198 491.	(−1)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.02	88PER
507.960	196 866.	(−2)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.02	88PER
508.625	196 609.	(2)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.02	88PER
509.519	196 264.	(1)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.02	88PER
510.252	195 982.	(1)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.02	88PER
516.578	193 582.	(−2)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.02	88PER
520.194	192 236.	(1)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	1	0.02	88PER
521.315	191 823.	(0)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	0	0.02	88PER
523.644	190 969.	(−1)	$5s^25p^4$	^3P	0	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.02	88PER
524.258	190 746.	(2)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
528.235	189 310.	(1)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.02	88PER
529.826	188 741.	(−1)	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.02	88PER
529.955	188 695.	(2)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.02	88PER
533.910	187 297.	(−1)a	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1S^\circ$	0	0.02	88PER
534.537	187 078.	(−2)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.02	88PER
535.476	186 750.	(4)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.02	88PER
536.524	186 385.	(5)	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.02	88PER
536.844	186 274.	(3)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.02	88PER
537.106	186 183.	(−1)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.02	88PER
537.287	186 120.	(0)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.02	88PER
538.490	185 704.	(1)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.02	88PER
540.190	185 120.	(4)	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.02	88PER
544.108	183 787.	(5)	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.02	88PER
547.790	182 552.	(0)	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.02	88PER
548.021	182 475.	(−1)*	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.02	88PER
548.021	182 475.	(−1)*	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.02	88PER
548.444	182 334.	(4)	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	0.02	88PER
549.447	182 001.	(−1)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.02	88PER
559.030	178 881.	(0)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.02	88PER
559.256	178 809.	(0)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.02	88PER
560.355	178 458.	(5)	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.02	88PER
565.620	176 797.	(3)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.02	88PER
569.292	175 657.	(1)	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.02	88PER
570.365	175 326.	(5)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.02	88PER
574.738	173 992.	(3)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.02	88PER
590.707	169 289.	(1)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.02	88PER
611.511	163 529.	(0)	$5s^25p^4$	^{3}P	2	–	$5s5p^5$	$^1P^\circ$	1	0.02	88PER
627.403	159 387.	1	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	0.02	88PER
629.216	158 928.	7	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	0.02	88PER
633.089	157 956.	(1)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2P^\circ)5d$	$^1P^\circ$	1	0.02	88PER
639.419	156 392.	8	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	0.02	88PER
646.667	154 639.	10	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	0.02	88PER
650.479	153 733.	12	$5s^25p^4$	^{3}P	1	–	$5s5p^5$	$^1P^\circ$	1	0.02	88PER
657.831	152 015.	0	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	0.02	88PER
660.133	151 485.	1	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	0.02	88PER
661.125	151 257.	1	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	0.02	88PER
662.516	150 940.	2	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	0	0.02	88PER
664.878	150 404.	8	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	0.02	88PER
668.476	149 594.	1	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	0.02	88PER
670.550	149 131.	(1)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	0.02	88PER
673.798	148 412.	7	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	0.02	88PER
673.991	148 370.	9	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	0.02	88PER
676.602	147 797.	9	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	0.02	88PER
679.022	147 271.	6	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	0.02	88PER
682.563	146 507.	12	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	0.02	88PER
682.926	146 429.	13	$5s^25p^4$	^{1}D	2	–	$5s5p^5$	$^1P^\circ$	1	0.02	88PER
685.599	145 858.	10	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	0.02	88PER
686.792	145 604.	(5)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	0.02	88PER
688.044	145 340.	10	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	0.02	88PER
688.239	145 298.	1	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	0.02	88PER
690.400	144 844.	12	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	0.02	88PER
691.036	144 710.	8	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	0.02	88PER
693.971	144 098.	10	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	0.02	88PER
697.584	143 352.	7	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	0.02	88PER
698.550	143 154.	12	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	0.02	88PER
699.069	143 047.	5	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	0.02	88PER
702.795	142 289.	10	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	0.02	88PER
703.906	142 064.	3	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	0.02	88PER
705.095	141 825.	12	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	0.02	88PER
705.777	141 688.	2	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	0.02	88PER
710.575	140 731.	4	$5s^25p^4$	^{3}P	2	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	0.02	88PER
710.680	140 710.	4	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	0	0.02	88PER
711.190	140 609.	(4)	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
715.986	139 668.	(2)	$5s^25p^4$	^3P	0	–	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	0.02	88PER
717.911	139 293.	2	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	0.02	88PER
719.694	138 948.	12	$5s^25p^4$	^1S	0	–	$5s^25p^3(^2P^\circ)5d$	$^1P^\circ$	1	0.02	88PER
721.199	138 658.	13	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	0.02	88PER
721.630	138 575.	(2d)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	0.02	88PER
723.055	138 302.	(−1)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	0.02	88PER
723.873	138 146.	(5)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	0.02	88PER
724.623	138 003.	(1)	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	0.02	88PER
727.042	137 544.	12	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	0.02	88PER
731.023	136 795.	5	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	0.02	88PER
733.314	136 367.	12	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	0.02	88PER
737.977	135 506.	7	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	0.02	88PER
742.570	134 667.	13	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	0.02	88PER
744.142	134 383.	2	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	0.02	88PER
750.160	133 305.	4	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	0.02	88PER
750.451	133 253.	5	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	0.02	88PER
754.144	132 601.	(6)	$5s^25p^4$	^3P	0	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	0.02	88PER
756.031	132 270.	6	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	0.02	88PER
761.532	131 314.	1	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	0.02	88PER
761.790	131 270.	(5)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	0.02	88PER
763.729	130 936.	9	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	0.02	88PER
765.120	130 698.	(7)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	0.02	88PER
765.442	130 643.	2	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	0.02	88PER
769.140	130 015.	8	$5s^25p^4$	^3P	0	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	0.02	88PER
779.124	128 349.	13*	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	0.02	88PER
779.124	128 349.	13*	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	0.02	88PER
779.782	128 241.	(4)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	0.02	88PER
780.027	128 201.	8	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	0.02	88PER
784.785	127 423.	(1)	$5s^25p^4$	^1S	0	–	$5s5p^5$	$^1P^\circ$	1	0.02	88PER
790.056	126 573.	4	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	0.02	88PER
792.896	126 120.	12	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	0.02	88PER
793.282	126 059.	0	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	0.02	88PER
793.968	125 950.	9	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	0.02	88PER
796.067	125 618.	11	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	0.02	88PER
799.333	125 104.	11	$5s^25p^4$	^3P	0	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	0.02	88PER
800.228	124 964.	(0)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	0.02	88PER
800.835	124 870.	2	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	0.02	88PER
801.978	124 692.	11	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	0.02	88PER
808.860	123 631.	(2)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	0.02	88PER
810.110	123 440.	10	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	0.02	88PER
811.138	123 284.	(2)	$5s^25p^4$	^1S	0	–	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	0.02	88PER
820.166	121 927.	(4)	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	0.02	88PER
822.640	121 560.	8	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	0.02	88PER
823.202	121 477.	15	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	0.02	88PER
824.878	121 230.	12	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	0.02	88PER
826.132	121 046.	(3)	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	0.02	88PER
838.244	119 297.	(1)	$5s^25p^4$	^1S	0	–	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	0.02	88PER
838.441	119 269.	0	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	0.02	88PER
840.151	119 026.	11	$5s^25p^4$	^3P	2	–	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	0.02	88PER
850.563	117 569.	3	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	0.02	88PER
851.152	117 488.	2	$5s^25p^4$	^3P	0	–	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	0.02	88PER
852.947	117 241.	13	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	0.02	88PER
861.064	116 135.	6	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	0.02	88PER
863.385	115 823.	1	$5s^25p^4$	^3P	1	–	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	0.02	88PER
870.342	114 897.	2	$5s^25p^4$	^3P	1	–	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	0.02	88PER
878.789	113 793.	10	$5s^25p^4$	^3P	0	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	0.02	88PER
889.284	112 450.	13	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	0.02	88PER
891.835	112 128.	11	$5s^25p^4$	^3P	1	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	0.02	88PER
894.003	111 856.	13	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	0.02	88PER
895.401	111 682.	6	$5s^25p^4$	^3P	1	–	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	0.02	88PER
896.014	111 605.	13	$5s^25p^4$	^3P	2	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	0.02	88PER
898.870	111 251.	7	$5s^25p^4$	^1D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	0.02	88PER
901.745	110 896.	13	$5s^25p^4$	^3P	0	–	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
915.487	109 231.	10	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	0.02	88PER
917.258	109 021.	1	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	0.02	88PER
930.702	107 446.	2	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	0.02	88PER
953.983	104 824.	11	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	0.02	88PER
958.591	104 320.	10	$5s^25p^4$	^{3}P	0	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	0.02	88PER
960.325	104 131.	(1)	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	0.02	88PER
965.548	103 568.	10	$5s^25p^4$	^{3}P	2	–	$5s5p^5$	$^3P^\circ$	1	0.02	88PER
971.818	102 900.	15	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	0.02	88PER
974.133	102 655.	12	$5s^25p^4$	^{3}P	1	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	0.02	88PER
979.980	102 043.	(1)	$5s^25p^4$	^{1}S	0	–	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	0.02	88PER
981.097	101 927.	12	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	0.02	88PER
1002.087	99 791.7	6	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^{3}D	2	0.02	88PER
1014.825	98 539.2	12	$5s^25p^4$	^{3}P	1	–	$5s5p^5$	$^3P^\circ$	0	0.02	88PER
1016.188	98 407.0	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5p^6$	^{1}S	0	0.02	88PER
1017.682	98 262.5	13	$5s^25p^4$	^{3}P	2	–	$5s5p^5$	$^3P^\circ$	2	0.02	88PER
1047.799	95 438.2	15	$5s^25p^4$	^{3}P	0	–	$5s5p^5$	$^3P^\circ$	1	0.02	88PER
1048.755	95 351.2	11	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	0.02	88PER
1055.326	94 757.4	11	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	0.02	88PER
1058.136	94 505.8	9	$5s^25p^4$	^{1}D	2	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	0.02	88PER
1060.529	94 292.6	1	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	2	0.02	88PER
1066.393	93 774.1	18	$5s^25p^4$	^{3}P	1	–	$5s5p^5$	$^3P^\circ$	1	0.02	88PER
1077.844	92 777.8	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^{3}D	3	0.02	88PER
1088.954	91 831.2	20	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5p^6$	^{1}S	0	0.02	88PER
1092.168	91 561.0	10	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^{1}D	2	0.02	88PER
1109.257	90 150.4	10	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^{3}P	2	0.02	88PER
1120.11	89 276.9	1	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	1	0.01	93GAL
1124.428	88 934.1	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5p^6$	^{1}S	0	0.02	88PER
1127.018	88 729.7	2	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^{3}D	2	0.02	88PER
1130.348	88 468.3	12	$5s^25p^4$	^{3}P	1	–	$5s5p^5$	$^3P^\circ$	2	0.02	88PER
1131.838	88 351.9	0	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^{3}F	3	0.02	88PER
1135.613	88 058.2	7	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^{3}P	2	0.02	88PER
1156.475	86 469.7	11	$5s^25p^4$	^{1}D	2	–	$5s5p^5$	$^3P^\circ$	1	0.02	88PER
1158.329	86 331.3	10	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^{3}D	3	0.02	88PER
1159.34	86 256.0	0*	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^{1}D	2	0.01	93GAL
1159.34	86 256.0	0*	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	2	0.01	93GAL
1160.992	86 133.2	2	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^{3}P	1	0.02	88PER
1162.73	86 004.5	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	2	0.01	93GAL
1163.061	85 980.0	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	3	0.02	88PER
1166.228	85 746.5	0.5	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^{1}D	2	0.02	88PER
1166.467	85 729.0	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	3	0.02	88PER
1166.789	85 705.3	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	4	0.02	88PER
1170.812	85 410.8	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	2	0.02	88PER
1170.988	85 398.0	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^{3}F	2	0.02	88PER
1173.146	85 240.9	9	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5p^6$	^{1}S	0	0.02	88PER
1173.370	85 224.6	0.5	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^{3}D	1	0.02	88PER
1173.857	85 189.3	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	5	0.02	88PER
1174.243	85 161.2	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	1	0.02	88PER
1177.617	84 917.3	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^4S^\circ)5f$	^{5}F	1	0.02	88PER
1178.630	84 844.3	8	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^{3}P	2	0.02	88PER
1179.186	84 804.3	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^{3}F	2	0.02	88PER
1182.729	84 550.2	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^{3}F	3	0.02	88PER
1185.767	84 333.6	2	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^{3}D	2	0.02	88PER
1186.249	84 299.3	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^{3}F	3	0.02	88PER
1188.853	84 114.7	11	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^{3}D	3	0.02	88PER
1192.13	83 883.5	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^{3}F	3	0.01	93GAL
1195.107	83 674.5	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^{1}G	4	0.02	88PER
1198.683	83 424.9	11	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^{3}D	2	0.02	88PER
1200.033	83 331.0	4	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^{3}F	2	0.02	88PER
1202.593	83 153.7	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^{3}D	3	0.02	88PER
1205.929	82 923.6	12	$5s^25p^4$	^{1}S	0	–	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	0.02	88PER
1227.943	81 437.0	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^{3}D	2	0.02	88PER
1228.991	81 367.6	0.5	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^{3}P	1	0.02	88PER
1232.070	81 164.2	12u	$5s^25p^4$	^{1}D	2	–	$5s5p^5$	$^3P^\circ$	2	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1237.316	80 820.1	2u	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1238.955	80 713.2	1	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1242.875	80 458.6	10	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1244.235	80 370.7	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.02	88PER
1247.610	80 153.3	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1249.319	80 043.6	7	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1251.484	79 905.1	0	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1253.650	79 767.1	10	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.02	88PER
1267.171	78 915.9	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1269.293	78 784.0	2	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1272.819	78 565.8	10	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1277.742	78 263.1	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1278.311	78 228.2	2	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1281.633	78 025.5	11	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1292.427	77 373.8	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1294.477	77 251.3	6	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.02	88PER
1294.672	77 239.6	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1299.234	76 968.4	2	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.02	88PER
1303.385	76 723.3	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1305.475	76 600.5	0	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1305.721	76 586.0	4	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.02	88PER
1306.260	76 554.4	9*	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1306.260	76 554.4	9*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1309.656	76 355.9	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.02	88PER
1309.818	76 346.5	10	$5s^25p^4$	^1S	0	–	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	0.02	88PER
1309.881	76 342.8	4u	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1314.088	76 098.4	10	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1314.390	76 080.9	1	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1315.20	76 034.1	0	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.01	93GAL
1316.442	75 962.3	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1316.873	75 937.5	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.02	88PER
1325.014	75 470.9	2	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER
1327.475	75 331.0	1	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1330.927	75 135.6	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1333.145	75 010.6	11*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1333.145	75 010.6	11*	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1337.652	74 757.9	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1338.153	74 729.9	5	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1341.518	74 542.4	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1342.534	74 486.0	11	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.02	88PER
1342.928	74 464.2	6	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1344.320	74 387.1	5	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1347.545	74 209.0	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1350.47	74 048.3	0	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.01	93GAL
1355.012	73 800.1	10	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1356.358	73 726.8	11	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.02	88PER
1364.977	73 261.3	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1366.709	73 168.5	8	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.02	88PER
1370.076	72 988.7	0.5h	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1374.809	72 737.4	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1375.295	72 711.7	8	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5p^6$	^1S	0	0.02	88PER
1377.722	72 583.6	10	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1378.128	72 562.2	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1380.055	72 460.9	9	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.02	88PER
1389.129	71 987.6	11	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.02	88PER
1391.936	71 842.4	5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	5	0.02	88PER
1392.122	71 832.8	1	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1395.91	71 637.9	0	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.01	93GAL
1397.573	71 552.6	2u	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1399.271	71 465.8	4*	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.02	88PER
1399.271	71 465.8	4*	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1S	0	0.02	88PER
1399.271	71 465.8	4*	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1404.586	71 195.4	3	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1404.681	71 190.5	2	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1405.042	71 172.2	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1407.990	71 023.2	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1412.466	70 798.2	15	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1412.846	70 779.1	0.5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1413.006	70 771.1	0.5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1414.921	70 675.3	10	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.02	88PER
1418.027	70 520.5	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1425.200	70 165.6	6	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER
1425.999	70 126.3	10*	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5p^6$	^1S	0	0.02	88PER
1425.999	70 126.3	10*	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1427.844	70 035.7	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1428.810	69 988.3	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1432.185	69 823.4	9	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.02	88PER
1433.956	69 737.1	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1434.820	69 695.2	2	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.02	88PER
1435.045	69 684.2	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1435.15	69 679.1	0b	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^5F	5	0.01	93GAL
1436.707	69 603.6	6	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1438.259	69 528.5	1	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1440.089	69 440.2	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1440.650	69 413.1	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.02	88PER
1441.199	69 386.7	2	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1446.268	69 143.5	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1447.487	69 085.2	5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	5	0.02	88PER
1447.580	69 080.8	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1450.093	68 961.1	7	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1451.141	68 911.3	3	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.02	88PER
1453.408	68 803.8	7	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.02	88PER
1455.769	68 692.2	1	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1457.351	68 617.6	8	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.02	88PER
1457.845	68 594.4	6	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1458.806	68 549.2	4	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1461.206	68 436.6	5	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.02	88PER
1462.549	68 373.8	2	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1465.73	68 225.4	3	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.01	93GAL
1468.178	68 111.6	6	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.02	88PER
1468.378	68 102.4	1	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.02	88PER
1471.312	67 966.5	9	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1472.727	67 901.2	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1474.781	67 806.7	2	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1482.243	67 465.3	9w	$5s^25p^4$	^1S	0	–	$5s5p^5$	$^3P^\circ$	1	0.02	88PER
1484.688	67 354.2	6	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1486.291	67 281.6	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.02	88PER
1488.474	67 182.9	4	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1495.446	66 869.7	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1497.708	66 768.7	4	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.02	88PER
1501.157	66 615.3	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.02	88PER
1503.997	66 489.5	0	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1504.900	66 449.6	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1508.178	66 305.2	5	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1509.458	66 248.9	7	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.02	88PER
1509.530	66 245.8	3	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1509.841	66 232.1	5	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1511.119	66 176.1	6	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.02	88PER
1515.558	65 982.3	0	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1520.619	65 762.7	5	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1521.501	65 724.6	5	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1524.280	65 604.7	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.02	88PER
1526.586	65 505.6	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1530.558	65 335.6	0	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.02	88PER
1532.765	65 241.6	2	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1533.416	65 213.9	6	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1535.224	65 137.1	3*	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1535.224	65 137.1	3*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1535.328	65 132.7	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1536.32	65 090.6	3w	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.01	93GAL
1536.386	65 087.8	9	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1536.812	65 069.8	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1538.220	65 010.2	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.02	88PER
1538.863	64 983.0	8	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.02	88PER
1540.970	64 894.2	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1546.952	64 643.2	9	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1547.346	64 626.8	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.02	88PER
1548.008	64 599.1	9	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1549.961	64 517.8	9	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.02	88PER
1551.651	64 447.5	10	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1553.907	64 353.9	10	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1554.426	64 332.4	8	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.02	88PER
1557.460	64 207.1	5	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1558.178	64 177.5	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.02	88PER
1560.011	64 102.1	11	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1560.437	64 084.6	10	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.02	88PER
1562.006	64 020.2	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1562.547	63 998.1	12	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.02	88PER
1569.338	63 721.1	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1569.753	63 704.3	9	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1570.865	63 659.2	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1572.188	63 605.6	9	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.02	88PER
1574.847	63 498.2	9	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.02	88PER
1578.154	63 365.2	9	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1579.476	63 312.1	10	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.02	88PER
1584.577	63 108.3	9	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1585.770	63 060.8	12	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5p^6$	^1S	0	0.02	88PER
1589.351	62 918.8	4	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.02	88PER
1592.466	62 795.7	10	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1596.687	62 629.7	11w	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1598.260	62 568.0	11	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1601.817	62 429.1	9	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.02	88PER
1603.241	62 373.7	10	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.02	88PER
1604.074	62 341.3	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.02	88PER
1605.106	62 301.2	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1605.322	62 292.8	9	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1606.393	62 251.3	2	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1610.658	62 086.4	5	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.02	88PER
1612.970	61 997.4	6	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1616.083	61 878.0	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER
1619.484	61 748.1	8	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1621.407	61 674.8	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.02	88PER
1622.595	61 629.7	8	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1623.748	61 585.9	6	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1624.678	61 550.7	5	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1626.183	61 493.7	3	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.02	88PER
1626.309	61 488.9	1	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1628.148	61 419.5	1	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.02	88PER
1629.312	61 375.6	6	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1630.38	61 335.4	0	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.01	93GAL
1631.429	61 296.0	10	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1633.255	61 227.4	10	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1633.489	61 218.7	7	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.02	88PER
1634.072	61 196.8	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.02	88PER
1635.382	61 147.8	11	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1637.572	61 066.0	3	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1642.395	60 886.7	3	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1642.767	60 872.9	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1646.504	60 734.7	2	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1647.010	60 716.1	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1647.338	60 704.0	10	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1653.039	60 494.6	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1656.069	60 384.0	3	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.02	88PER
1656.612	60 364.2	10	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1660.808	60 211.7	4	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.02	88PER
1661.029	60 203.6	1	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1661.093	60 201.3	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1663.390	60 118.2	9	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1669.355	59 903.4	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1672.557	59 788.7	9	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1673.566	59 752.6	9	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.02	88PER
1674.633	59 714.6	11	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1675.824	59 672.1	11	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1678.873	59 563.8	6	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1684.194	59 375.6	2	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5p^6$	^1S	0	0.02	88PER
1685.823	59 318.2	9	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.02	88PER
1691.798	59 108.7	5	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1693.703	59 042.2	9	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1694.134	59 027.2	7	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.02	88PER
1694.820	59 003.3	7	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.02	88PER
1696.936	58 929.7	4	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1699.515	58 840.3	10	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.02	88PER
1699.754	58 832.0	9	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1703.820	58 691.6	8	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.02	88PER
1704.946	58 652.9	1	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1705.178	58 644.9	12	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.02	88PER
1712.522	58 393.4	10	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.02	88PER
1713.867	58 347.6	3	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.02	88PER
1716.290	58 265.2	5	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1717.005	58 240.9	5	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1H	5	0.02	88PER
1717.515	58 223.7	12	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.02	88PER
1722.358	58 059.9	8	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1724.776	57 978.5	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.02	88PER
1724.983	57 971.6	7	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1727.429	57 889.5	9	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.02	88PER
1728.420	57 856.3	5	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.02	88PER
1733.536	57 685.6	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1734.368	57 657.9	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.02	88PER
1735.371	57 624.6	9	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.02	88PER
1750.609	57 123.0	5	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.02	88PER
1752.022	57 076.9	4	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1752.318	57 067.3	4	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1752.626	57 057.2	11	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.02	88PER
1757.396	56 902.4	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.02	88PER
1759.622	56 830.4	0	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1760.178	56 812.4	6	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1767.089	56 590.2	10	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1770.099	56 494.0	10	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER
1770.174	56 491.6	10	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1770.919	56 467.9	0	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.02	88PER
1771.778	56 440.5	5	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1774.033	56 368.7	9	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.02	88PER
1775.174	56 332.5	9	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	5	0.02	88PER
1777.551	56 257.2	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1777.910	56 245.8	11	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.02	88PER
1778.425	56 229.5	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.02	88PER
1778.783	56 218.2	9	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5p^6$	^1S	0	0.02	88PER
1780.067	56 177.7	3	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.02	88PER
1784.661	56 033.1	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1785.311	56 012.6	2	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1786.678	55 969.8	8	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1789.258	55 889.1	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1790.544	55 848.9	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1H	5	0.02	88PER
1799.691	55 565.1	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.02	88PER
1799.769	55 562.7	7	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1799.900	55 558.6	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1803.073	55 460.9	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.02	88PER
1804.117	55 428.8	10	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.02	88PER
1805.316	55 392.0	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.02	88PER
1807.746	55 317.5	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.02	88PER
1810.520	55 232.8	11	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.02	88PER
1811.263	55 210.1	11	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.02	88PER
1812.301	55 178.5	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1814.503	55 111.5	10	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1815.085	55 093.8	11	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.02	88PER
1817.397	55 023.8	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.02	88PER
1819.857	54 949.4	11	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.02	88PER
1821.334	54 904.8	10	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1823.391	54 842.9	11	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.02	88PER
1825.867	54 768.5	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.02	88PER
1826.490	54 749.8	12	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.02	88PER
1827.367	54 723.5	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.02	88PER
1827.883	54 708.1	9	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER
1830.939	54 616.8	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.02	88PER
1831.680	54 594.7	1	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1833.588	54 537.9	1	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.02	88PER
1834.255	54 518.0	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.02	88PER
1835.532	54 480.1	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.02	88PER
1835.811	54 471.8	15	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	5	0.02	88PER
1837.223	54 430.0	4	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.02	88PER
1837.300	54 427.7	5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.02	88PER
1848.695	54 092.2	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1848.989	54 083.6	8	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.02	88PER
1850.903	54 027.7	6	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1852.583	53 978.7	9	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1853.884	53 940.8	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	5	0.02	88PER
1854.375	53 926.5	11	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)4f$	^3H	6	0.02	88PER
1855.196	53 902.7	9	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.02	88PER
1856.569	53 862.8	2	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)4f$	^1H	5	0.02	88PER
1859.877	53 767.0	9	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.02	88PER
1860.181	53 758.2	8	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1860.631	53 745.2	4	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1865.157	53 614.8	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1866.547	53 574.9	10	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	5	0.02	88PER
1869.447	53 491.8	0	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.02	88PER
1870.665	53 456.9	9	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1872.254	53 411.6	9	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1874.915	53 335.8	10	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.02	88PER
1875.772	53 311.4	10	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1H	5	0.02	88PER
1875.878	53 308.4	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.02	88PER
1878.049	53 246.7	1	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.02	88PER
1882.957	53 108.0	1	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1883.687	53 087.4	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.02	88PER
1886.426	53 010.3	11	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.02	88PER
1888.083	52 963.8	8	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.02	88PER
1888.374	52 955.6	7	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1892.723	52 833.9	0	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.02	88PER
1895.099	52 767.7	11	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.02	88PER
1896.921	52 717.0	10	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.02	88PER
1899.156	52 655.0	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.02	88PER
1899.216	52 653.3	9	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1900.693	52 612.4	4	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.02	88PER
1901.779	52 582.3	0	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.02	88PER
1904.599	52 504.5	6*	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.02	88PER
1904.599	52 504.5	6*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER

Spectral lines of Xe III–Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1907.038	52 437.3	0	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.02	88PER
1910.626	52 338.9	1	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1911.131	52 325.0	0	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.02	88PER
1912.564	52 285.8	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.02	88PER
1915.595	52 203.1	2	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.02	88PER
1916.211	52 186.3	5	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1921.644	52 038.8	5	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.02	88PER
1924.197	51 969.7	8	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.02	88PER
1924.757	51 954.6	4	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)4f$	^3G	5	0.02	88PER
1926.291	51 913.2	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.02	88PER
1927.622	51 877.4	5	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.02	88PER
1929.158	51 836.1	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.02	88PER
1930.083	51 811.2	11	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.02	88PER
1935.038	51 678.6	6	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.02	88PER
1941.329	51 511.1	4	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.02	88PER
1942.913	51 469.1	12	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5p^6$	^1S	0	0.02	88PER
1945.419	51 402.8	1	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	5	0.02	88PER
1956.154	51 120.7	2	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.02	88PER
1956.759	51 104.9	7	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.02	88PER
1966.345	50 855.8	7	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1966.733	50 845.7	1	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.02	88PER
1967.905	50 815.5	6	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.02	88PER
1969.474	50 775.0	4	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.02	88PER
1970.059	50 759.9	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.02	88PER
1970.899	50 738.3	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.02	88PER
1973.829	50 663.0	4	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.02	88PER
1974.445	50 647.1	1	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.02	88PER
1978.705	50 538.1	8	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.02	88PER
1979.266	50 523.8	2	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.02	88PER
1980.606	50 489.6	2	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.02	88PER
1983.985	50 403.6	5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.02	88PER
1985.405	50 367.6	10	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.02	88PER
1989.377	50 267.0	1	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.02	88PER
1990.182	50 246.7	7	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.02	88PER
1997.330	50 066.8	6	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.02	88PER
1997.497	50 062.7	0	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.02	88PER

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2001.085	49 956.7	1	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
2006.317	49 826.5	4	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
2013.859	49 639.9	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2016.174	49 582.9	2	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
2017.911	49 540.2	2	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
2018.714	49 520.5	5	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2020.914	49 466.6	6	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
2021.304	49 457.1	2	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.05	88PER
2026.062	49 340.9	10	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2029.023	49 268.9	8	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.05	88PER
2029.216	49 264.3	9	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
2031.996	49 196.9	8	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)4f$	^3H	5	0.05	88PER
2037.670	49 059.9	7	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
2038.394	49 042.5	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
2039.314	49 020.4	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
2041.276	48 973.2	1	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.05	88PER
2043.286	48 925.1	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^5F	5	0.05	88PER
2044.430	48 897.7	1	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.05	88PER
2046.555	48 846.9	8	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
2051.875	48 720.3	7	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
2052.166	48 713.4	5	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2052.729	48 700.0	8	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
2055.034	48 645.4	6	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	5	0.05	88PER
2060.385	48 519.1	0	$5s5p^5$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
2060.702	48 511.6	3	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.05	88PER
2067.175	48 359.8	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
2067.384	48 354.9	7	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2072.247	48 241.4	0	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2072.866	48 227.0	7	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2075.090	48 175.3	7	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
2077.610	48 116.9	0	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
2079.995	48 061.7	5	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2083.088	47 990.4	6	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.05	88PER
2084.461	47 958.8	2	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
2084.598	47 955.6	9	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2090.225	47 826.5	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
2091.996	47 786.0	9	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.05	88PER
2093.862	47 743.5	5	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.05	88PER
2095.126	47 714.7	6	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2095.350	47 709.6	3	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2096.570	47 681.8	9	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
2099.545	47 614.3	0	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
2106.534	47 456.3	1	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.05	88PER
2114.762	47 271.7	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
2118.036	47 198.6	9	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
2122.205	47 105.9	2	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
2123.163	47 084.7	4	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.05	88PER
2128.473	46 967.2	1	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
2130.809	46 915.7	3	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.05	88PER
2138.432	46 748.5	9	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.05	88PER
2139.236	46 730.9	6	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2139.375	46 727.9	7*	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2139.375	46 727.9	7*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.05	88PER
2142.129	46 667.8	2	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2144.189	46 623.0	0	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2147.683	46 547.2	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
2156.896	46 348.4	8	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
2158.96	46 304.0	1	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.01	93GAL
2159.33	46 296.1	0u	$5s^25p^3(^4S^\circ)6p$	^3P	0	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.01	93GAL
2160.935	46 261.7	7	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
2165.526	46 163.7	3*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
2165.526	46 163.7	3*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
2172.779	46 009.6	9	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2179.684	45 863.8	7	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2185.017	45 751.9	3	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.05	88PER
2189.828	45 651.4	12w	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2192.428	45 597.3	1	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
2192.78	45 590.0	0	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.01	93GAL
2194.292	45 558.6	1	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
2197.801	45 485.8	10	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
2198.583	45 469.6	1	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
2199.287	45 455.1	6	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	3	0.05	88PER
2199.514	45 450.4	6	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2202.695	45 384.8	7	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
2203.682	45 364.4	0	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
2204.20	45 353.8	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.01	93GAL
2204.333	45 351.0	5	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2205.51	45 326.8	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.01	93GAL
2210.420	45 226.2	9	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
2213.799	45 157.1	0	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2214.382	45 145.3	9*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
2214.382	45 145.3	9*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
2220.544	45 020.0	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2223.640	44 957.3	5	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2225.071	44 928.4	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
2227.588	44 877.6	3	$5s^25p^3(^2D^\circ)6p$	^3P	0	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2230.419	44 820.7	6*	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.05	88PER
2230.419	44 820.7	6*	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2231.673	44 795.5	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
2235.349	44 721.9	2	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
2243.970	44 550.1	11	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2245.280	44 524.1	8	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2247.335	44 483.4	5	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2247.556	44 479.0	6	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2249.630	44 438.0	0	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2258.847	44 256.7	5	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
2268.923	44 060.2	4	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
2271.055	44 018.8	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.05	88PER
2271.382	44 012.5	11w	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.05	88PER
2272.609	43 988.7	2	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
2273.488	43 971.7	3	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
2273.709	43 967.4	1	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.05	88PER
2274.96	43 943.24	3u	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.01	93GAL
2281.13	43 824.39	2	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.01	93GAL
2283.828	43 772.6	5	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
2286.634	43 718.9	7	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2288.009	43 692.6	2	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.05	88PER
2290.834	43 638.8	12b	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
2298.540	43 492.5	1	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2300.353	43 458.2	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2300.716	43 451.3	9	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2300.876	43 448.3	9	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
2303.735	43 394.4	9*	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
2303.735	43 394.4	9*	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
2305.502	43 361.2	5*	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
2305.502	43 361.2	5*	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.05	88PER
2309.922	43 278.2	7	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2312.276	43 234.1	11	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2313.392	43 213.3	12	$5s5p^5$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
2316.583	43 153.8	10	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
2320.992	43 071.8	5	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
2323.455	43 026.1	3	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.05	88PER
2326.369	42 972.3	0	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.05	88PER
2333.555	42 839.9	7	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2338.884	42 742.3	9	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
2339.398	42 732.9	1	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2350.563	42 530.0	8	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2353.95	42 468.79	0*	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.01	93GAL
2353.95	42 468.79	0*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.01	93GAL
2354.456	42 459.7	11	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.05	88PER
2359.159	42 375.0	0	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
2365.416	42 262.9	14	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.05	88PER
2366.115	42 250.5	12	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.05	88PER
2369.595	42 188.4	18b	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2378.714	42 026.7	0	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2379.783	42 007.8	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
2382.087	41 967.2	11	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
2383.247	41 946.8	13	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^1G	4	0.05	88PER
2385.673	41 904.1	11	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
2385.902	41 900.1	8b	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
2388.573	41 853.2	11	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.05	88PER
2392.376	41 786.7	4b	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
2394.083	41 756.9	10	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
2397.566	41 696.3	8	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
2403.792	41 588.3	9	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
2406.00	41 550.12	0	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.01	93GAL
2406.229	41 546.2	1	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2412.505	41 438.1	6	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2414.104	41 410.6	2	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2414.230	41 408.5	4	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2414.544	41 403.1	9	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
2416.72	41 365.83	3*	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.01	93GAL
2416.72	41 365.83	3*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.01	93GAL
2418.744	41 331.2	8	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
2419.740	41 314.2	7	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2422.139	41 273.3	14b	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2422.767	41 262.6	9	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2423.918	41 243.0	3	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2436.491	41 030.2	12	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2439.516	40 979.3	6w	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
2441.523	40 945.6	11	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
2446.503	40 862.3	8	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
2447.083	40 852.6	10	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2452.644	40 760.0	11	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2463.061	40 587.6	10	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2463.557	40 579.4	10	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
2464.555	40 563.0	2	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
2468.393	40 499.9	7b	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
2471.319	40 452.0	10	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
2472.377	40 434.7	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
2477.062	40 358.2	0	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	0	0.05	88PER
2479.130	40 324.6	7	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.05	88PER
2479.876	40 312.4	8	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2483.464	40 254.2	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
2485.006	40 229.2	7	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.05	88PER
2486.727	40 201.4	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
2501.037	39 971.4	12	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
2504.907	39 909.6	11	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.05	88PER
2509.74	39 832.8	4	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
2510.52	39 820.4	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	81HUM
2511.288	39 808.2	1	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2513.337	39 775.8	1	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	1	0.05	88PER
2514.09	39 763.9	0h	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.05	88PER
2515.117	39 747.6	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
2521.428	39 648.1	5	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
2523.967	39 608.3	7	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
2533.318	39 462.1	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2536.868	39 406.8	7	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
2538.918	39 375.0	1	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2541.028	39 342.3	1	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2541.88	39 329.1	3	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2544.10	39 294.8	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2550.55	39 195.5	3*	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
2550.55	39 195.5	3*	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
2568.81	38 916.9	9*	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2568.81	38 916.9	9*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
2570.26	38 894.9	5	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
2572.33	38 863.6	7*	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
2572.33	38 863.6	7*	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
2574.61	38 829.2	2	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2578.37	38 772.6	13	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
2578.62	38 768.8	9	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2590.42	38 592.2	12	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
2591.24	38 580.0	8	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
2591.69	38 573.3	10	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
2594.53	38 531.1	7	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2595.03	38 523.7	7a	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
2600.12	38 448.3	15a	$5s5p^5$	$^3P^\circ$	0	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
2607.50	38 339.5	7b	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2608.33	38 327.26	0	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.01	93GAL

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2608.90	38 318.9	6	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	81HUM
2610.57	38 294.4	5	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.05	88PER
2611.03	38 287.6	1	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2613.99	38 244.3	1	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2615.40	38 223.66	1	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.01	93GAL
2616.63	38 205.7	1	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
2616.90	38 201.8	0	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
2619.85	38 158.7	8w	$5s^25p^3(^4S^\circ)6p$	^5P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2624.52	38 090.8	4	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2626.98	38 055.2	7	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2634.21	37 950.7	13	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
2637.54	37 902.8	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	81HUM
2639.15	37 879.7	9	$5s^25p^3(^2D^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2641.13	37 851.3	2	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
2658.27	37 607.3	9	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
2659.36	37 591.8	5	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
2661.00	37 568.7	7	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2667.94	37 471.0	10a	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
2669.01	37 455.9	20*	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	88PER
2669.01	37 455.9	20*	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
2670.25	37 438.5	6	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2678.55	37 322.5	6*	$5s^25p^3(^4S^\circ)6p$	^5P	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2678.55	37 322.5	6*	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
2685.51	37 225.8	5	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
2687.03	37 204.8	5	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	81HUM
2691.22	37 146.8	4	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
2691.44	37 143.8	12a	$5s^25p^3(^2D^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
2694.12	37 106.9	5	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	0	0.05	88PER
2695.65	37 085.8	3*	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
2695.65	37 085.8	3*	$5s^25p^3(^4S^\circ)4f$	^3F	2	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2696.51	37 074.0	15b*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
2696.51	37 074.0	15b*	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2701.50	37 005.5	5	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
2701.71	37 002.6	0	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
2702.31	36 994.4	2	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.05	88PER
2704.41	36 965.7	3	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
2708.45	36 910.5	12	$5s^25p^3(^2D^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.05	88PER
2710.94	36 876.6	6	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.05	88PER
2711.34	36 871.2	0	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.05	88PER
2713.39	36 843.3	10a	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
2714.05	36 834.4	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
2717.35	36 789.66	30	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.01	81HUM
2718.10	36 779.5	2	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
2725.69	36 677.1	1wb	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
2727.20	36 656.8	11a	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
2728.20	36 643.4	9	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2736.99	36 525.7	14	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
2739.19	36 496.3	4	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
2740.78	36 475.2	16	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
2747.86	36 381.2	14	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
2754.88	36 288.5	13	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2757.56	36 253.2	3	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
2759.19	36 231.8	11	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
2760.72	36 211.7	13	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2761.58	36 200.5	15	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
2762.73	36 185.4	9b	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2763.01	36 181.7	6*	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2763.01	36 181.7	6*	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
2765.95	36 143.3	5	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
2766.18	36 140.3	15	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2769.17	36 101.2	10	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
2772.40	36 059.2	16	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2774.44	36 032.7	0	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2774.79	36 028.1	6a	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
2776.96	36 000.0	16	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2777.94	35 987.3	13	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
2779.64	35 965.3	11	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
2782.30	35 930.9	4	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2782.69	35 925.8	10	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.05	88PER
2783.33	35 917.6	17	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
2784.93	35 897.0	7	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
2785.33	35 891.8	6	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
2785.80	35 885.7	7	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2792.47	35 800.0	3	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.05	88PER
2794.84	35 769.7	14	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
2797.12	35 740.5	12*	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	0	0.05	88PER
2797.12	35 740.5	12*	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.05	88PER
2797.87	35 730.9	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.05	88PER
2800.20	35 701.2	17	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
2802.19	35 675.9	3	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
2805.09	35 639.0	4	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2805.61	35 632.37	1	$5s^25p^3(^4S^\circ)4f$	^5F	1	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.01	93GAL
2806.40	35 622.3	6	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
2807.22	35 611.9	12	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
2808.46	35 596.2	7	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2808.57	35 594.8	7	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2809.06	35 588.6	10a*	$5s^25p^3(^4S^\circ)6p$	^5P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
2809.06	35 588.6	10a*	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
2809.06	35 588.6	10a*	$5s^25p^3(^2P^\circ)6p$	^3D	1	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2809.53	35 582.7	3	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
2810.46	35 570.9	7b	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
2811.61	35 556.3	8	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	0.05	88PER
2814.46	35 520.3	13a	$5s^25p^3(^4S^\circ)6p$	^5P	2	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
2815.27	35 510.1	1	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
2815.92	35 501.9	16	$5s^25p^3(^4S^\circ)6p$	^5P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.05	88PER
2817.36	35 483.8	8b	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
2825.99	35 375.4	14	$5s^25p^3(^4S^\circ)6p$	^5P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	0.05	88PER
2827.46	35 357.0	17	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
2832.83	35 290.0	2	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
2832.97	35 288.3	6	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
2833.12	35 286.4	8	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
2838.81	35 215.7	5	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.05	88PER
2844.12	35 149.9	4	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
2845.06	35 138.3	7	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2847.67	35 106.1	14	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
2847.92	35 103.0	10	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
2850.27	35 074.1	4	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2856.67	34 995.5	3	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
2857.81	34 981.6	1	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	81HUM
2862.42	34 925.2	25	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
2863.86	34 907.7	2	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
2864.62	34 898.4	8	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2868.45	34 851.8	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
2869.52	34 838.8	3	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
2871.10	34 819.6	17	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2871.27	34 817.6	17	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
2871.69	34 812.5	25*	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2871.69	34 812.5	25*	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
2872.75	34 799.6	4	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
2873.29	34 793.1	4	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
2879.36	34 719.8	5	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.05	88PER
2886.68	34 631.7	12	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2886.93	34 628.7	2	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.05	88PER
2889.97	34 592.3	8	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
2891.72	34 571.4	18	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
2895.04	34 531.7	6	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2896.07	34 519.4	2	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
2896.65	34 512.5	14	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
2897.70	34 500.0	4	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
2902.29	34 445.5	5	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2904.17	34 423.2	7	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2906.56	34 394.9	15	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
2910.09	34 353.1	3	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.05	88PER
2910.37	34 349.8	12	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
2911.48	34 336.7	6	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
2911.91	34 331.7	19	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
2912.38	34 326.1	20	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2914.14	34 305.4	18	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
2915.04	34 294.8	7	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2916.63	34 276.1	8	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2917.60	34 264.7	15	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
2923.53	34 195.2	16	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	5	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
2923.96	34 190.2	11	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
2926.07	34 165.5	11	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
2927.13	34 153.2	4	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
2930.27	34 116.6	18	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
2932.09	34 095.4	10b	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2932.76	34 087.6	18	$5s^25p^3(^4S^\circ)5d$	$^5D^\circ$	0	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
2935.72	34 053.2	10	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
2935.86	34 051.6	15b	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
2939.11	34 014.0	12	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
2939.73	34 006.8	10	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2940.21	34 001.2	17	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
2941.39	33 987.6	12	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
2942.06	33 979.9	11b	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
2943.43	33 964.0	7	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2944.56	33 951.0	7	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2944.68	33 949.6	10	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	1	0.05	88PER
2945.23	33 943.3	18	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
2945.48	33 940.40	1	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.01	93GAL
2947.51	33 917.0	17	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
2948.07	33 910.6	19	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
2950.76	33 879.67	1	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.01	93GAL
2951.53	33 870.8	3	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
2953.86	33 844.1	6	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
2953.94	33 843.2	7	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
2954.10	33 841.4	10a	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
2954.17	33 840.6	10a	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
2954.93	33 831.9	17	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
2959.28	33 782.1	9a	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	0	0.05	88PER
2959.36	33 781.2	15a	$5s^25p^3(^4S^\circ)6p$	^3P	0	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
2960.07	33 773.1	6	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
2960.34	33 770.0	13	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2960.87	33 764.0	4	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
2964.17	33 726.4	13	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
2964.93	33 717.8	11	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
2966.92	33 695.1	10a	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
2968.43	33 678.0	10	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2968.57	33 676.4	12	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
2969.43	33 666.7	9	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
2969.77	33 662.8	23	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
2970.08	33 659.3	10	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2970.49	33 654.7	19	$5s^25p^3(^4S^\circ)6p$	^5P	3	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4	0.05	88PER
2971.17	33 647.0	11	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.05	88PER
2971.26	33 645.9	9	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
2974.90	33 604.8	6b	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
2976.75	33 583.9	10	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
2980.09	33 546.2	3	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
2981.32	33 532.4	8	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	0	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2984.58	33 495.8	16	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
2985.53	33 485.1	14	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
2986.11	33 478.6	11	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2990.33	33 431.4	7	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
2990.82	33 425.9	3	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
2991.25	33 421.1	14	$5s^25p^3(^4S^\circ)6p$	^5P	3	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
2991.49	33 418.4	11	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
2992.89	33 402.8	15	$5s^25p^3(^4S^\circ)6p$	^5P	3	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.05	88PER
2994.37	33 386.3	4	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
2994.67	33 382.9	14	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
2994.95	33 379.8	8	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
2997.50	33 351.4	9	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
2999.03	33 334.4	11a	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
2999.29	33 331.5	9	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
3001.52	33 306.7	11	$5s^25p^3(^4S^\circ)4f$	^5F	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
3004.26	33 276.4	18a	$5s^25p^3(^4S^\circ)6p$	^5P	3	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	0.05	88PER
3004.65	33 272.0	5	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.05	88PER
3009.03	33 223.6	1b	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
3014.13	33 167.4	15a	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
3014.59	33 162.3	11	$5s^25p^3(^2D^\circ)6p$	^3P	0	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
3015.41	33 153.3	11	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
3015.77	33 149.4	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)4f$	^3H	4	0.05	88PER
3020.33	33 099.3	6	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3023.65	33 063.0	18	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.05	88PER
3023.83	33 061.0	25	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
3026.52	33 031.6	12	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3042.04	32 863.1	12	$5s^25p^3(^2P^\circ)6p$	^3D	2	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3048.86	32 789.6	7	$5s^25p^3(^2P^\circ)6p$	^3P	1	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3051.21	32 764.4	6	$5s^25p^3(^2P^\circ)6p$	^3P	0	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3054.48	32 729.3	14	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
3055.26	32 720.9	1	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
3065.19	32 614.9	18	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
3068.57	32 579.0	2	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1S^\circ$	0	0.05	88PER
3073.51	32 526.6	6	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
3080.42	32 453.7	11	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
3082.89	32 427.7	4b	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
3083.53	32 420.9	18	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
3088.87	32 364.9	3	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3090.00	32 353.1	11	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3091.05	32 342.1	18	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
3099.87	32 250.1	11	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
3102.36	32 224.2	9	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
3102.69	32 220.7	10	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	0	0.05	88PER
3103.47	32 212.6	13	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
3106.34	32 182.9	13	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
3106.47	32 181.5	9	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
3107.56	32 170.3	6	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
3114.41	32 099.5	12	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
3120.52	32 036.7	10*	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
3120.52	32 036.7	10*	$5s^25p^3(^4S^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	0.05	88PER
3121.01	32 031.6	5	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
3122.15	32 019.9	9	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
3124.60	31 994.8	3	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
3124.95	31 991.2	9	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
3126.77	31 972.6	3	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
3138.28	31 855.4	20	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
3141.63	31 821.4	11*	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
3141.63	31 821.4	11*	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	88PER
3150.69	31 729.9	15	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
3150.83	31 728.5	14	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
3150.97	31 727.1	18	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
3151.83	31 718.4	15	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
3153.00	31 706.6	13	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3153.44	31 702.2	11	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
3155.51	31 681.4	10	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
3156.67	31 669.8	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
3160.66	31 629.8	8*	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
3160.66	31 629.8	8*	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
3164.47	31 591.7	9*	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
3164.47	31 591.7	9*	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3169.75	31 539.1	7	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
3177.11	31 466.0	7	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
3184.27	31 395.3	11	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.05	88PER
3185.21	31 386.0	16	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
3196.25	31 277.6	15	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
3196.51	31 275.1	14	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
3199.22	31 248.6	7	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
3214.12	31 103.7	2	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1S	0	0.05	88PER
3222.99	31 018.1	12	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
3227.16	30 978.1	12	$5s^25p^3(^4S^\circ)6p$	^3P	0	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
3231.70	30 934.54	4w	$5s^25p^3(^2D^\circ)6p$	^3P	0	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.01	93GAL
3235.73	30 896.0	13	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
3236.84	30 885.42	3	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	0	0.01	93GAL
3240.47	30 850.8	10	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
3242.86	30 828.1	25	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3244.13	30 816.0	12	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.05	88PER
3246.85	30 790.2	22	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
3248.62	30 773.4	7	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
3256.25	30 701.3	12	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
3256.52	30 698.8	2	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
3257.85	30 686.2	5	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
3261.46	30 652.3	1	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
3267.05	30 599.8	20	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3268.98	30 581.8	22	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3269.40	30 577.8	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
3276.39	30 512.6	13	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
3278.44	30 493.5	12	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
3279.13	30 487.1	3	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
3280.50	30 474.4	14	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.05	88PER
3284.64	30 436.0	8	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
3285.82	30 425.0	14	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
3287.80	30 406.7	13	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.05	88PER
3287.91	30 405.7	16	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
3288.54	30 399.9	5	$5s^25p^3(^4S^\circ)4f$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
3295.94	30 331.6	14	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
3301.54	30 280.2	14	$5s^25p^3(^4S^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	0.05	88PER
3304.05	30 257.2	8	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.05	88PER
3306.46	30 235.1	11a	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
3306.80	30 232.0	11a	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
3312.20	30 182.73	0b	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.01	93GAL
3314.26	30 164.0	6	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
3314.87	30 158.4	12	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
3317.45	30 135.0	6	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3319.55	30 115.9	7	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
3320.07	30 111.2	8*	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
3320.07	30 111.2	8*	$5s^25p^3(^4S^\circ)4f$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
3326.39	30 054.0	5	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
3331.65	30 006.5	15a	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
3332.83	29 995.90	5u	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.01	93GAL
3334.23	29 983.3	8	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
3336.24	29 965.2	7	$5s^25p^3(^2D^\circ)6p$	^3P	0	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.05	88PER
3338.99	29 940.6	15a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
3339.50	29 936.0	12b	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
3340.06	29 931.0	13	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
3340.37	29 928.2	14a	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
3340.67	29 925.5	16a	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3344.27	29 893.3	4	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
3344.93	29 887.4	7	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
3345.49	29 882.4	2	$5s^25p^3(^2D^\circ)5d$	$^1G^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
3349.76	29 844.3	12	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
3350.35	29 839.1	6	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
3353.54	29 810.7	4	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3357.99	29 771.2	15	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
3358.50	29 766.6	3	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
3361.00	29 744.50	1	$5s^25p^3(^4S^\circ)6p$	^3P	0	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.01	93GAL
3362.77	29 728.8	8	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
3363.50	29 722.4	2	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
3365.32	29 706.3	3	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
3365.70	29 703.0	3	$5s^25p^3(^4S^\circ)4f$	^5F	1	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3370.65	29 659.3	9	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
3376.98	29 603.8	3	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
3379.03	29 585.8	9	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
3381.64	29 563.0	4	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
3383.92	29 543.0	10*	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
3383.92	29 543.0	10*	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
3384.10	29 541.5	12b	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
3386.23	29 522.9	4	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
3390.64	29 484.5	10	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
3392.58	29 467.6	3	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1G	4	0.05	88PER
3395.53	29 442.0	2b	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
3399.87	29 404.5	7	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
3403.91	29 369.6	8	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
3414.54	29 278.1	2	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
3435.74	29 097.5	8	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
3444.24	29 025.7	20a	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
3444.39	29 024.4	15a	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
3451.23	28 966.9	11	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
3454.27	28 941.4	16	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
3467.22	28 833.3	15	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
3468.22	28 825.0	14	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
3472.35	28 790.7	10	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3479.14	28 734.5	4	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
3488.13	28 660.5	6	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
3494.51	28 608.1	8	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
3494.82	28 605.6	4	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
3501.65	28 549.8	11	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
3509.77	28 483.7	13b	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
3519.11	28 408.2	11	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
3522.80	28 378.4	16	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
3531.62	28 307.5	3	$5s^25p^3(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
3531.82	28 305.9	7	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	–	$5p^6$	^1S	0	0.05	88PER
3539.94	28 241.0	12	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
3542.35	28 221.8	20	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
3544.86	28 201.8	10	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
3546.88	28 185.7	5	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
3552.12	28 144.2	18	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
3561.23	28 072.2	10	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
3561.37	28 071.1	14	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
3562.22	28 064.4	14	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3562.99	28 058.3	10	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)4f$	^3D	1	0.05	88PER
3564.86	28 043.6	4	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
3565.19	28 041.0	17	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
3568.63	28 014.0	2	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
3574.40	27 968.7	5	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1F	3	0.05	88PER
3578.54	27 936.4	6b	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
3579.70	27 927.3	25	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
3583.65	27 896.5	25	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
3584.27	27 891.7	5*	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
3584.27	27 891.7	5*	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3591.98	27 831.9	8	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	88PER
3593.38	27 821.0	5	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	1	0.05	88PER
3596.59	27 796.2	17	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.05	88PER
3601.87	27 755.4	12	$5s^25p^3(^2D^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
3607.02	27 715.8	22a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
3609.07	27 700.1	8h	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
3609.46	27 697.1	22a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
3610.97	27 685.5	0	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
3615.86	27 648.1	10	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
3618.86	27 625.1	8	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
3620.00	27 616.4	11	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
3621.59	27 604.3	4	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3623.13	27 592.6	21a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
3624.06	27 585.5	25	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	88PER
3628.52	27 551.6	8	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
3632.14	27 524.1	15	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
3636.02	27 494.8	11	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
3640.99	27 457.2	15	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
3644.14	27 433.5	10	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
3649.57	27 392.7	13	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
3653.09	27 366.3	8	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3654.61	27 354.9	16	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
3675.17	27 201.9	2	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
3676.63	27 191.1	23	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	0	0.05	88PER
3687.04	27 114.3	3	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
3689.83	27 093.8	6	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
3707.63	26 963.7	1	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1S	0	0.05	88PER
3708.15	26 960.0	10	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
3708.94	26 954.2	8	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
3711.91	26 932.6	10	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
3721.03	26 866.6	1	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
3721.82	26 860.9	1	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
3728.91	26 809.9	5b	$5s^25p^3(^2P^\circ)6p$	^1D	2	–	$5s^25p^3(^2P^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3739.60	26 733.2	2	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
3743.74	26 703.7	2	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
3745.71	26 689.6	18	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
3751.44	26 648.9	3	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
3757.98	26 602.5	5	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3P	2	0.05	88PER
3762.28	26 572.1	19	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.05	88PER
3765.85	26 546.9	14	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
3768.93	26 525.2	12	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
3772.25	26 501.8	1	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
3772.53	26 499.9	15	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
3775.49	26 479.1	2b	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
3776.32	26 473.3	24	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
3781.00	26 440.5	28	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3788.63	26 387.27	0	$5s^25p^3(^2P^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	0	0.01	93GAL
3791.67	26 366.1	15	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
3792.74	26 358.7	2	$5s^25p^3(^4S^\circ)4f$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
3801.71	26 296.5	8	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
3802.98	26 287.7	4w	$5s^25p^3(^4S^\circ)4f$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
3811.74	26 227.3	3	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
3816.78	26 192.7	7	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
3819.49	26 174.1	2	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3P	1	0.05	88PER
3823.15	26 149.0	3	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
3829.71	26 104.2	8	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
3841.53	26 023.9	20	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
3841.87	26 021.6	18	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
3847.40	25 984.2	8	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
3854.28	25 937.8	14	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
3860.19	25 898.1	2	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
3861.04	25 892.4	19	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
3861.51	25 889.3	7	$5s^25p^3(^2P^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3877.82	25 780.4	20	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
3880.46	25 762.8	18	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
3884.99	25 732.8	13	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
3890.98	25 693.2	2	$5s^25p^3(^2D^\circ)6p$	^3F	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
3895.05	25 666.3	19	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
3903.67	25 609.7	8	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
3915.31	25 533.5	8	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	4	0.05	88PER
3922.55	25 486.4	25	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
3932.81	25 419.9	2	$5s^25p^3(^2P^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
3941.50	25 363.9	3	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
3950.12	25 308.5	3	$5s^25p^3(^2P^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.05	88PER
3950.59	25 305.5	25	$5s^25p^3(^4S^\circ)6s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
3965.45	25 210.7	8	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.05	88PER
3969.91	25 182.4	8	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	2	0.05	88PER
3985.96	25 081.0	12	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
3992.54	25 039.6	3	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
3992.85	25 037.7	21	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
3998.55	25 002.0	4	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
4021.60	24 858.7	7	$5s^25p^3(^4S^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
4026.82	24 826.5	2	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
4028.56	24 815.8	15	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
4030.46	24 804.1	1	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
4032.91	24 789.0	4a	$5s^25p^3(^2D^\circ)6p$	^3D	1	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
4043.23	24 725.7	14	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
4050.07	24 684.0	22	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
4058.15	24 634.8	5	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
4060.45	24 620.9	25	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
4060.88	24 618.3	2	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	81HUM
4072.97	24 545.2	7	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
4078.70	24 510.7	21	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
4095.03	24 413.0	5b	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
4109.08	24 329.5	20	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
4110.05	24 323.7	12	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
4112.34	24 310.2	1-	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	81HUM
4132.40	24 192.2	12	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
4141.99	24 136.2	13b	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
4143.92	24 124.9	5	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.05	88PER
4145.74	24 114.3	22a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
4150.78	24 085.1	3b	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
4152.04	24 077.8	8a	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
4152.74	24 073.7	4b	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
4154.66	24 062.6	5b	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
4162.37	24 018.0	2	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
4167.60	23 987.9	2	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
4176.53	23 936.6	16	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
4181.15	23 910.1	4	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
4194.87	23 831.9	9	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
4202.39	23 789.3	2a	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
4203.89	23 780.8	13	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
4209.58	23 748.6	14	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
4213.99	23 723.8	24	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
4216.71	23 708.5	10	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
4225.96	23 656.6	0	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	3	0.05	88PER
4226.97	23 650.9	13	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
4232.66	23 619.2	1-	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	81HUM
4235.76	23 601.9	2a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
4240.24	23 576.9	16	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
4246.38	23 542.8	2	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
4263.40	23 448.9	12	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
4272.58	23 398.5	17	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
4274.14	23 389.9	4	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
4278.91	23 363.9	4	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
4285.89	23 325.8	20	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4287.58	23 316.6	5a	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
4297.96	23 260.3	1a	$5s^25p^3(^2P^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
4305.83	23 217.8	1a	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
4308.01	23 206.0	6	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
4309.32	23 199.0	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
4319.85	23 142.4	2	$5s^25p^3(^4S^\circ)4f$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
4357.63	22 941.8	3	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	88PER
4373.06	22 860.9	3	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.05	88PER
4386.01	22 793.4	4	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	2	0.05	88PER
4387.47	22 785.8	4	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
4387.72	22 784.5	4	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
4395.17	22 745.9	13	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
4413.06	22 653.7	8	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	0	0.05	88PER
4417.78	22 629.4	2	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
4417.97	22 628.5	3	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
4425.25	22 591.2	1-	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	81HUM
4434.17	22 545.8	15	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
4453.29	22 449.0	1	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	4	0.05	88PER
4453.60	22 447.4	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
4468.16	22 374.3	5	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
4470.90	22 360.6	8b	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1P	1	0.05	88PER
4480.05	22 314.9	2	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
4488.90	22 270.9	4a	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
4492.80	22 251.6	5a*	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
4492.80	22 251.6	5a*	$5s^25p^3(^2D^\circ)4f$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
4503.41	22 199.2	14a	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
4525.63	22 090.2	1	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
4528.24	22 077.4	2h*	$5s^25p^3(^2P^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.05	88PER
4528.24	22 077.4	2h*	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
4537.38	22 033.0	9a	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
4555.51	21 945.3	1a	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
4569.12	21 879.9	7	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
4578.03	21 837.3	2	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
4592.98	21 766.3	2h	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
4601.60	21 725.5	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
4614.83	21 663.2	2	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^1P	1	0.05	88PER
4620.42	21 637.0	6	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	3	0.05	88PER
4631.46	21 585.42	3	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.01	93GAL
4631.65	21 584.5	2a	$5s^25p^3(^2D^\circ)4f$	^3G	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
4632.64	21 579.9	8	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
4641.40	21 539.19	4*	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.01	93GAL
4641.40	21 539.19	4*	$5s^25p^3(^2D^\circ)4f$	^3G	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.01	93GAL
4643.60	21 529.0	1	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
4644.17	21 526.3	5	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
4656.73	21 468.3	1h	$5s^25p^3(^2D^\circ)4f$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
4657.78	21 463.4	17a	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
4671.60	21 400.0	8	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
4671.81	21 399.0	3	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
4673.67	21 390.5	18a	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
4680.73	21 358.2	1h	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
4683.55	21 345.4	20	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
4685.19	21 337.9	2a	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
4697.42	21 282.3	6	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
4712.58	21 213.9	20b	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
4723.60	21 164.4	16	$5s^25p^3(^4S^\circ)6s$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^5P	1	0.05	88PER
4727.21	21 148.21	0	$5s^25p^3(^2P^\circ)6p$	^3D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.01	93GAL
4743.87	21 073.94	3	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.01	93GAL
4748.94	21 051.4	18	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
4757.32	21 014.4	10	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
4781.08	20 909.9	3h	$5s^25p^3(^2P^\circ)6p$	^3D	1	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	2	0.05	88PER
4794.49	20 851.4	25	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
4796.51	20 842.7	8a	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
4836.28	20 671.27	0	$5s^25p^3(^2P^\circ)6p$	^3S	1	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.01	93GAL

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4841.80	20 647.71	1b	$5s^25p^3(^2D^\circ)6p$	^3P	0	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.01	93GAL
4850.93	20 608.85	0	$5s^25p^3(^2D^\circ)6p$	^1P	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.01	93GAL
4854.80	20 592.42	0	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.01	93GAL
4869.40	20 530.7	21	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
4881.05	20 481.7	2	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^1D	2	0.05	88PER
4906.42	20 375.77	0u	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	4	0.01	93GAL
4918.87	20 324.2	1	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
4926.72	20 291.8	1a	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
4927.51	20 288.6	5	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
4943.57	20 222.65	0	$5s^25p^3(^2D^\circ)6p$	^3D	2	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.01	93GAL
4952.53	20 186.1	1	$5s^25p^3(^2D^\circ)4f$	^3G	3	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
4996.10	20 010.0	0	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
5008.53	19 960.37	23	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
5023.01	19 902.83	3	$5s^25p^3(^2D^\circ)4f$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
5026.70	19 888.22	0u	$5s^25p^3(^2D^\circ)6p$	^3F	3	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.01	93GAL
5038.62	19 841.17	2	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
5040.06	19 835.50	1b	$5s^25p^3(^2P^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1F^\circ$	3	0.05	88PER
5041.40	19 830.23	9	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
5070.53	19 716.31	1h	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	81HUM
5107.33	19 574.25	14	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	0	0.05	88PER
5114.53	19 546.69	1	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
5142.98	19 438.56	6	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
5148.03	19 419.50	1	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3D	3	0.05	88PER
5203.67	19 211.86	1*	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
5203.67	19 211.86	1*	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1P	1	0.05	88PER
5223.62	19 138.48	11	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
5229.99	19 115.17	1	$5s^25p^3(^2D^\circ)4f$	^3H	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
5233.10	19 103.81	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3D	2	0.05	88PER
5233.96	19 100.68	1	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.05	88PER
5238.92	19 082.59	16	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
5242.67	19 068.94	1	$5s^25p^3(^2D^\circ)4f$	^3H	5	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
5253.96	19 027.97	1	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.01	93GAL
5271.35	18 965.19	2	$5s^25p^3(^2D^\circ)4f$	^3H	4	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.01	93GAL
5292.92	18 887.91	4	$5s^25p^3(^2D^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)6p$	^5P	3	0.05	88PER
5310.97	18 823.72	7	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
5316.58	18 803.85	0	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	1	0.01	93GAL
5318.30	18 797.77	0	$5s^25p^3(^2P^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.01	93GAL
5321.57	18 786.22	1b	$5s^25p^3(^2D^\circ)4f$	^3H	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.01	93GAL
5322.80	18 781.88	1	$5s^25p^3(^2P^\circ)6p$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
5332.98	18 746.03	0b	$5s^25p^3(^4S^\circ)4f$	^5F	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.01	93GAL
5347.17	18 696.28	5	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	2	0.05	88PER
5347.87	18 693.83	6	$5s^25p^3(^2D^\circ)4f$	^3H	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
5364.39	18 636.27	1	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.05	88PER
5367.03	18 627.10	14	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
5371.01	18 613.30	2	$5s^25p^3(^2D^\circ)5d$	$^3G^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^5P	2	0.05	88PER
5372.83	18 606.99	3a	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3S	1	0.05	88PER
5384.15	18 567.87	1	$5s^25p^3(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
5386.64	18 559.29	6	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
5401.01	18 509.91	17	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
5413.49	18 467.24	10	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	2	0.05	88PER
5426.68	18 422.35	0b	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.01	93GAL
5431.38	18 406.41	0	$5s^25p^3(^2P^\circ)6p$	^3S	1	–	$5s^25p^3(^2D^\circ)7s$	$^1D^\circ$	2	0.01	93GAL
5448.54	18 348.44	0	$5s^25p^3(^2D^\circ)4f$	^3H	4	–	$5s^25p^3(^2D^\circ)7s$	$^3D^\circ$	3	0.01	93GAL
5453.06	18 333.23	5	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)4f$	^3F	2	0.05	88PER
5454.32	18 329.00	3	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	81HUM
5462.12	18 302.82	1	$5s^25p^3(^2D^\circ)4f$	^3G	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
5470.94	18 273.32	2	$5s^25p^3(^2D^\circ)4f$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
5481.19	18 239.15	1	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
5503.98	18 163.62	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.05	88PER
5509.65	18 144.93	3*	$5s^25p^3(^2D^\circ)4f$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	0	0.05	88PER
5509.65	18 144.93	3*	$5s^25p^3(^2D^\circ)5d$	$^3S^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^3P	0	0.05	88PER
5510.53	18 142.03	2	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
5524.33	18 096.72	8	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5533.61	18 066.37	0	$5s5p^5$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^3F	2	0.01	93GAL
5537.20	18 054.65	0	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.01	93GAL
5540.33	18 044.45	0	$5s^25p^3(^2D^\circ)6p$	^1F	3	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.01	93GAL
5545.61	18 027.27	0	$5s^25p^3(^2P^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	1	0.01	93GAL
5548.05	18 019.35	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^2D^\circ)6p$	^3F	4	0.05	88PER
5552.78	18 004.00	5	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
5565.83	17 961.78	1a	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
5567.88	17 955.17	0	$5s^25p^3(^2D^\circ)4f$	^3G	3	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.01	93GAL
5570.07	17 948.11	0*	$5s^25p^3(^2P^\circ)6p$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.01	93GAL
5570.07	17 948.11	0*	$5s^25p^3(^4S^\circ)4f$	^5F	1	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.01	93GAL
5604.33	17 838.39	4	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
5610.18	17 819.79	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p^3(^4S^\circ)4f$	^5F	4	0.05	88PER
5641.26	17 721.62	1	$5s^25p^3(^2D^\circ)4f$	^3G	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
5653.87	17 682.09	1	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	88PER
5657.24	17 671.56	1	$5s^25p^3(^2D^\circ)4f$	^3G	3	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	2	0.05	88PER
5663.85	17 650.94	1	$5s^25p^3(^2D^\circ)4f$	^3G	4	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
5666.27	17 643.40	2	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.01	93GAL
5701.24	17 535.18	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	2	0.05	88PER
5711.80	17 502.76	0	$5s^25p^3(^2P^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.01	93GAL
5748.67	17 390.50	6	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	88PER
5754.03	17 374.30	4	$5s^25p^3(^2D^\circ)4f$	^3G	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
5761.94	17 350.45	1	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
5780.51	17 294.72	2	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	88PER
5857.55	17 067.25	3	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	88PER
5904.13	16 932.60	0	$5s^25p^3(^2D^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.01	93GAL
5913.6	16 905.49	(1)	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
5961.15	16 770.64	(10)H	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3D	2	0.05	88PER
5970.0	16 745.78	(1)	$5s^25p^3(^4S^\circ)6p$	^5P	1	–	$5s5p^5$	$^1P^\circ$	1	0.05	88PER
6026.51	16 588.76	1a	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
6035.31	16 564.57	0	$5s^25p^3(^4S^\circ)6p$	^5P	2	–	$5s5p^5$	$^1P^\circ$	1	0.01	93GAL
6060.35	16 496.13	(1)	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)4f$	^3G	3	0.05	88PER
6064.50	16 484.84	0	$5s^25p^3(^2P^\circ)6p$	^3P	2	–	$5s^25p^3(^2D^\circ)6d$	$^1P^\circ$	1	0.01	93GAL
6110.35	16 361.15	3	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4	0.05	88PER
6111.78	16 357.32	0a	$5s^25p^3(^2D^\circ)4f$	^3G	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
6111.90	16 357.00	0a	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^3F	3	0.05	88PER
6129.10	16 311.09	1	$5s^25p^3(^2D^\circ)4f$	^3G	5	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
6135.21	16 294.85	0	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	3	0.01	93GAL
6163.87	16 219.09	0b	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3P	1	0.01	93GAL
6196.42	16 133.89	1	$5s^25p^3(^4S^\circ)4f$	^3F	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
6203.81	16 114.67	1	$5s^25p^3(^2D^\circ)4f$	^3D	3	–	$5s^25p^3(^2D^\circ)6d$	$^3P^\circ$	2	0.05	88PER
6205.96	16 109.09	10	$5s^25p^3(^4S^\circ)4f$	^5F	4	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.05	88PER
6221.64	16 068.49	5	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
6238.19	16 025.86	13	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1F	3	0.05	88PER
6259.05	15 972.45	14	$5s^25p^3(^4S^\circ)4f$	^5F	5	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4	0.05	88PER
6260.10	15 969.77	7	$5s^25p^3(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p^3(^4S^\circ)4f$	^5F	3	0.05	88PER
6268.33	15 948.80	1	$5s^25p^3(^2D^\circ)6s$	$^1D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	88PER
6273.33	15 690.18	2	$5s^25p^3(^2D^\circ)4f$	^3G	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
6275.94	15 936.09	1a	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)4f$	^3G	4	0.05	88PER
6283.74	15 929.46	2	$5s^25p^3(^2D^\circ)6p$	^3F	4	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.05	88PER
6333.90	15 909.69	6	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
6341.26	15 783.70	3	$5s^25p^3(^2D^\circ)6p$	^3D	3	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	0.05	88PER
6367.63	15 765.38	3	$5s^25p^3(^2D^\circ)6p$	^3P	1	–	$5s^25p^3(^4S^\circ)7s$	$^3S^\circ$	1	0.05	88PER
6371.65	15 700.09	3h	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	81HUM
6396.07	15 630.28	1	$5s^25p^3(^2D^\circ)4f$	^1P	1	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
6407.53	15 602.33	1	$5s^25p^3(^4S^\circ)4f$	^5F	2	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
6409.67	15 597.12	1	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	88PER
6454.53	15 488.71	2	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
6456.10	15 484.95	3	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
6462.19	15 470.35	1	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
6484.78	15 416.46	3	$5s^25p^3(^2D^\circ)6p$	^3P	2	–	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	0.05	88PER
6493.33	15 396.16	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.05	88PER
6501.08	15 377.81	7	$5s^25p^3(^4S^\circ)4f$	^5F	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	0.05	88PER
6513.62	15 348.21	2	$5s^25p^3(^4S^\circ)4f$	^5F	1	–	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	0	0.05	88PER

Spectral lines of Xe III–Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
6530.17	15 309.31	7	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.05	88PER
6541.47	15 282.86	2	$5s^25p^3(^2D^\circ)4f$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	1	0.05	88PER
6545.58	15 273.27	4w	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.01	93GAL
6556.35	15 248.18	3a	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.05	88PER
6558.5	15 243.18	(6)Hw	$5s^25p^3(^2D^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	3	0.05	88PER
6585.26	15 181.24	3	$5s^25p^3(^2D^\circ)4f$	^3H	5	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
6608.30	15 128.31	2	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.05	88PER
6611.28	15 121.49	7	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.05	88PER
6619.33	15 103.10	15	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.05	88PER
6622.88	15 095.00	2	$5s^25p^3(^2P^\circ)6p$	^1D	2	–	$5s^25p^3(^2D^\circ)6d$	$^3S^\circ$	1	0.05	88PER
6625.46	15 089.12	8	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	0	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.05	88PER
6638.35	15 059.83	3a	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	1	0.05	88PER
6561.36	15 236.53	1b	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.01	93GAL
6656.17	15 019.51	15	$5s^25p^3(^2D^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	4	0.05	88PER
6657.74	15 015.97	2	$5s^25p^3(^2D^\circ)4f$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
6665.55	14 998.37	2	$5s^25p^3(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2P^\circ)6p$	^3D	2	0.05	88PER
6698.81	14 923.90	2	$5s^25p^3(^2D^\circ)4f$	^3H	4	–	$5s^25p^3(^2D^\circ)6d$	$^3F^\circ$	3	0.05	88PER
6710.60	14 897.68	0	$5s^25p^3(^2D^\circ)4f$	^3F	3	–	$5s^25p^3(^2D^\circ)6d$	$^3D^\circ$	2	0.05	88PER
6722.74	14 870.78	6	$5s^25p^3(^4S^\circ)4f$	^3F	3	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	0.05	88PER
6733.87	14 846.20	15	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.05	88PER
6759.44	14 790.04	2h	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	3	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.05	88PER
6767.94	14 771.47	4	$5s^25p^3(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p^3(^2D^\circ)4f$	^1D	2	0.05	88PER
6780.40	14 744.32	22a	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^5F	5	0.05	88PER
6799.47	14 702.97	4	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	1	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.05	88PER
6815.76	14 667.83	0h	$5s^25p^3(^2D^\circ)4f$	^3F	2	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
6818.16	14 662.67	5	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	0	0.05	81HUM
6826.81	14 644.09	0	$5s^25p^3(^2D^\circ)4f$	^3F	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
6847.83	14 599.14	4	$5s^25p^3(^2D^\circ)6p$	^1D	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
6850.12	14 594.26	1	$5s^25p^3(^4S^\circ)6d$	$^5D^\circ$	4	–	$5s^25p^3(^4S^\circ)5f$	^5F	4	0.05	88PER
6858.44	14 576.55	0	$5s^25p^3(^2D^\circ)4f$	^3H	4	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	3	0.05	88PER
6895.69	14 497.81	0	$5s^25p^3(^2D^\circ)5d$	$^3P^\circ$	0	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.05	88PER
6918.74	14 449.51	0	$5s^25p^3(^2D^\circ)4f$	^1H	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
6949.93	14 384.67	(100)H	$5s^25p^3(^2D^\circ)4f$	^3H	6	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	5	0.05	88PER
7043.99	14 192.59	20h	$5s^25p^3(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3P	1	0.05	81HUM
7049.35	14 181.79	4h	$5s^25p^3(^2D^\circ)5d$	$^1F^\circ$	3	–	$5s^25p^3(^2D^\circ)6p$	^3F	3	0.05	81HUM
7127.3	14 026.69	(10)Hw	$5s^25p^3(^2D^\circ)4f$	^1H	5	–	$5s^25p^3(^2D^\circ)6d$	$^3G^\circ$	4	0.05	88PER
7174.94	13 933.56	8h	$5s^25p^3(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^4S^\circ)6p$	^3P	1	0.05	81HUM
7185.93	13 912.25	8	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	81HUM
7298.99	13 696.75	2h	$5s^25p^3(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^3D	1	0.05	81HUM
7311.15	13 673.97	(10)h*	$5s^25p^3(^2D^\circ)4f$	^3P	1	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
7311.15	13 673.97	(10)h*	$5s^25p^3(^4S^\circ)7s$	$^5S^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	3	0.05	88PER
7353.0	13 596.15	(5)Hw	$5s^25p^3(^2D^\circ)4f$	^1F	3	–	$5s^25p^3(^2D^\circ)6d$	$^1D^\circ$	2	0.05	88PER
7449.0	13 420.92	4	$5s^25p^3(^2D^\circ)5d$	$^1D^\circ$	2	–	$5s^25p^3(^2P^\circ)6p$	^3D	1	0.10	81HUM
7460.82	13 399.66	30H	$5s^25p^3(^2D^\circ)6s$	$^3D^\circ$	3	–	$5s^25p^3(^4S^\circ)6p$	^3P	2	0.05	81HUM
7653.84	13 061.74	5h	$5s^25p^3(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p^3(^2D^\circ)6p$	^1D	2	0.05	81HUM
7777.1	12 854.73	(10)	$5s^25p^3(^4S^\circ)4f$	^3F	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	0.05	88PER
7790.5	12 832.62	(1)	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3G	3	0.05	88PER
7902.9	12 650.10	(4)	$5s^25p^3(^4S^\circ)4f$	^3F	2	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
8020.07	12 465.29	(5)b	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	–	$5s^25p^3(^4S^\circ)5f$	^5F	3	0.05	88PER
8038.26	12 437.08	(100)hb	$5s^25p^3(^4S^\circ)4f$	^3F	4	–	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	3	0.05	88PER
8047.28	12 423.14	(20)h	$5s^25p^3(^2D^\circ)4f$	^3G	5	–	$5s^25p^3(^2D^\circ)6d$	$^1G^\circ$	4	0.05	88PER
8239.3	12 133.62	(2)h	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	2	–	$5s^25p^3(^2P^\circ)4f$	^3F	2	0.05	88PER
8869.40	11 271.62	(2)H	$5s^25p^3(^4S^\circ)6d$	$^3D^\circ$	1	–	$5s^25p^3(^4S^\circ)5f$	^5F	2	0.05	88PER

4.4. Xe IV

Sb isoelectronic sequence

Ground state

$1s^22s^22p^63s^23p^63d^{10}4s^24p^64d^{10}5s^25p^3\,^4S^\circ_{3/2}$

Ionization energy 330 000±3000 cm^{-1} (40.9±0.4 eV) [83GRE]

Analyses of the spectrum of triply ionized xenon, Xe IV, were published by Gallardo *et al.* [95GAL] and by Tauheed *et al.* [93TAU]. We use the levels determined by Gallardo *et al.* [95GAL] for the $5s^25p^26p$, $5s^25p^24f$, $5s5p^4$, $5s^25p^25d$, and the $5s^25p^26s$ (except for the $^2S_{1/2}$) levels. We use the levels determined by Tauheed *et al.* [93TAU] for the $5s^25p^3$ and the $5s^25p^26s\ ^2S_{1/2}$ levels. Bertuccelli *et al.*

[00BER] suggest a change in the value of the energy of the $(^3P)4f\,^4D_{5/2}$ level from 191 978.1 to 191 995 cm^{-1}. However, the existing level energy is supported by seven lines in our Xe IV line table. Therefore, we have not made the change. The 3271.21 Å line reported by Bertuccelli *et al.* [00BER] was the only line they reported that could not be classified with the levels in the Xe IV level table.

Gallardo *et al.* [95GAL] provided the wavelengths for 618 line classifications in our list. The VUV was studied using direct-current hollow cathode discharge, theta-pinch discharge, and capillary pulsed discharge as the light sources. The visible/near UV spectra were obtained using pulsed discharge devices (conventionally pumped gas laser tubes). They estimate their wavelength uncertainty as ranging from 0.005 to 0.015 Å. We correct 12 misprints in their line list.

Tauheed *et al.* [93TAU] classified 114 VUV lines. They used a modified triggered spark initiated by a puff of xenon gas as their source. The quoted accuracy of their wavelength measurements is 0.005 Å. We correct one misprint in their line list.

These two data sets are the primary sources for our Xe IV line list. Where duplicate lines exist, these sources were given priority. Additional sources of lines (a total of 37 lines) in order of priority are [91REY], [86DIR], [85REY], [81HUM] (whose Xe IV lines in our Xe IV line list were due to Boyce), and [81GAL]. Note that all sources of lines in our list except [93TAU] and [81HUM] involve the work of the La Plata, Argentina group.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe IV levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] with the parameters determined by Gallardo *et al.* [95GAL] and by Tauheed *et al.* [93TAU] are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references and are not on a common scale.

The intensity codes given in the Xe IV line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
b	blend
h	hazy
*	two or more classifications of this line share the same intensity

The ionization energy was determined from data obtained from electron-impact-ionization studies by Gregory *et al.* [83GRE].

References

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

81GAL M. Gallardo and J. G. Reyna Almandos, Xenon Lines in the Range from 2000 Å to 7000 Å, Serie ''Monografias Cientificas'' No. 1, Centro de Investigaciones Opticas, La Plata, 1981.

81HUM C. J. Humphreys, Compilation of the Spectra of Ionized Xenon, 1981 (unpublished).

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85REY J. G. Reyna Almandos, F. Bredice, H. O. Di Rocco, and M. Gallardo, Opt. Pura Apl. **18**, 87 (1985).

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93TAU A. Tauheed, Y. N. Joshi, and E. H. Pinnington, Phys. Scr. **47**, 555 (1993).

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Energy levels of Xe IV

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.0	1	$5s^25p^3$	$^4S^\circ$	3/2	93TAU
13 267.0	1	$5s^25p^3$	$^2D^\circ$	3/2	93TAU
17 510.7	1	$5s^25p^3$	$^2D^\circ$	5/2	93TAU
28 036.4	1	$5s^25p^3$	$^2P^\circ$	1/2	93TAU
35 649.6	1	$5s^25p^3$	$^2P^\circ$	3/2	93TAU
99 663.8	0	$5s5p^4$	^4P	5/2	95GAL
106 923.2	0	$5s5p^4$	^4P	3/2	95GAL
109 254.4	0	$5s5p^4$	^4P	1/2	95GAL
121 928.9	0	$5s5p^4$	^2D	3/2	95GAL
125 474.7	0	$5s5p^4$	^2D	5/2	95GAL
150 737.3	0	$5s5p^4$	^2S	1/2	95GAL
165 995.3	0	$5s5p^4$	^2P	3/2	95GAL
177 951.1	0	$5s5p^4$	^2P	1/2	95GAL

Energy levels of Xe IV–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
133 027.4	0	$5s^25p^2(^3P)5d$	^2P	3/2	95GAL
134 980.6	0	$5s^25p^2(^3P)5d$	^4F	3/2	95GAL
136 495.9	0	$5s^25p^2(^3P)5d$	^4F	5/2	95GAL
136 796.3	0	$5s^25p^2(^3P)5d$	^2P	1/2	95GAL
141 624.8	0	$5s^25p^2(^3P)5d$	^4F	7/2	95GAL
141 824.4	0	$5s^25p^2(^1D)5d$	^2F	5/2	95GAL
145 011.2	0	$5s^25p^2(^1D)5d$	^2F	7/2	95GAL
145 105.7	0	$5s^25p^2(^3P)5d$	^4D	1/2	95GAL
145 991.1	0	$5s^25p^2(^3P)5d$	^4F	9/2	95GAL
146 206.5	0	$5s^25p^2(^3P)5d$	^4D	3/2	95GAL
148 685.0	0	$5s^25p^2(^3P)5d$	^4D	5/2	95GAL
155 863.9	0	$5s^25p^2(^3P)5d$	^4D	7/2	95GAL
159 642.8	0	$5s^25p^2(^3P)5d$	^4P	5/2	95GAL
160 665.1	0	$5s^25p^2(^1D)5d$	^2G	7/2	95GAL
161 434.7	0	$5s^25p^2(^3P)5d$	^4P	3/2	95GAL
162 866.5	0	$5s^25p^2(^3P)5d$	^4P	1/2	95GAL
163 463.1	0	$5s^25p^2(^1D)5d$	^2G	9/2	95GAL
163 596.7	0	$5s^25p^2(^3P)5d$	^2D	3/2	95GAL
169 001.5	0	$5s^25p^2(^3P)5d$	^2D	5/2	95GAL
172 892.2	0	$5s^25p^2(^1D)5d$	^2P	1/2	95GAL
176 041.9	0	$5s^25p^2(^3P)5d$	^2F	5/2	95GAL
176 122.2	0	$5s^25p^2(^1D)5d$	^2D	3/2	95GAL
177 923.3	0	$5s^25p^2(^3P)5d$	^2F	7/2	95GAL
179 000.5	0	$5s^25p^2(^1D)5d$	^2D	5/2	95GAL
182 571.0	0	$5s^25p^2(^1D)5d$	^2P	3/2	95GAL
188 272.6	0	$5s^25p^2(^1D)5d$	^2S	1/2	95GAL
190 030.5	0	$5s^25p^2(^1S)5d$	^2D	5/2	95GAL
190 369.3	0	$5s^25p^2(^1S)5d$	^2D	3/2	95GAL
157 205.0	0	$5s^25p^2(^3P)6s$	^4P	1/2	95GAL
165 280.0	0	$5s^25p^2(^3P)6s$	^4P	3/2	95GAL
167 206.4	0	$5s^25p^2(^3P)6s$	^2P	1/2	95GAL
170 490.3	0	$5s^25p^2(^3P)6s$	^4P	5/2	95GAL
173 221.8	0	$5s^25p^2(^3P)6s$	^2P	3/2	95GAL
186 048.6	0	$5s^25p^2(^1D)6s$	^2D	5/2	95GAL
187 546.9	0	$5s^25p^2(^1D)6s$	^2D	3/2	95GAL
202 054.6	0	$5s^25p^2(^1S)6s$	^2S	1/2	93TAU
180 151.5	1	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	95GAL
182 219.1	1	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	95GAL
187 532.9	1	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	95GAL
188 251.8	1	$5s^25p^2(^3P)4f$	$^4G^\circ$	9/2	95GAL
188 720.6	1	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	95GAL
189 842.1	1	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	95GAL
191 858.2	1	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	95GAL
191 978.1	1	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	95GAL
195 784.6	1	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	95GAL
196 325.2	1	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	95GAL
196 506.1	1	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	95GAL
196 654.7	1	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	95GAL
199 397.0	1	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	95GAL
202 076.1	1	$5s^25p^2(^3P)4f$	$^2G^\circ$	9/2	95GAL
205 205.0	1	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	95GAL
205 216.7	1	$5s^25p^2(^1D)4f$	$^2F^\circ$	7/2	95GAL
206 216.2	1	$5s^25p^2(^1D)4f$	$^2G^\circ$	9/2	95GAL
206 713.1	1	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	95GAL
208 621.1	1	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	95GAL
213 735.6	1	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	95GAL
219 001.7	1	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	95GAL
219 717.3	1	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	95GAL
220 789.8	1	$5s^25p^2(^1D)4f$	$^2P^\circ$	1/2	95GAL
228 975.4	1	$5s^25p^2(^1S)4f$	$^2F^\circ$	7/2	95GAL

Energy levels of Xe IV–Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
186 109.1	1	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	95GAL
190 792.5	1	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	95GAL
193 860.6	1	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	95GAL
196 724.9	1	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	95GAL
198 943.1	1	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	95GAL
200 486.2	1	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	95GAL
200 899.4	1	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	95GAL
201 027.6	1	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	95GAL
202 951.1	1	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	95GAL
204 140.0	1	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	95GAL
206 061.2	1	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	95GAL
207 056.6	1	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	95GAL
209 343.7	1	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	95GAL
215 625.5	1	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	95GAL
216 141.0	1	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	95GAL
216 910.7	1	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	95GAL
217 239.7	1	$5s^25p^2(^1D)6p$	$^2F^\circ$	7/2	95GAL
220 081.6	1	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	95GAL
224 498.2	1	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	95GAL
232 811.4	1	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	95GAL
235 560.7	1	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	95GAL

Spectral lines of Xe IV

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
525.305	190 365.6	5	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^1S)5d$	^2D	3/2	0.005	93TAU
558.65	179 003.	0.5	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2D	5/2	0.01	91REY
571.421	175 002.3	6	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2S	1/2	0.005	93TAU
574.656	174 017.2	30	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^1S)6s$	^2S	1/2	0.005	93TAU
577.295	173 222.	−1	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^2P	3/2	0.01	81HUM
578.399	172 891.0	5	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2P	1/2	0.005	93TAU
578.780	172 777.2	20	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^1D)6s$	^2D	5/2	0.005	93TAU
579.653	172 517.0	6	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1S)5d$	^2D	5/2	0.005	93TAU
586.555	170 487.0	45	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	5/2	0.005	93TAU
591.709	169 002.0	2	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2D	5/2	0.005	93TAU
593.349	168 534.9	20	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)6s$	^2D	5/2	0.005	93TAU
598.073	167 203.7	20	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^2P	1/2	0.005	93TAU
600.940	166 406.0	20	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1S)6s$	^2S	1/2	0.005	93TAU
602.440	165 991.6	25	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^2P	3/2	0.005	93TAU
603.38	165 733.	8	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2D	5/2	0.01	91REY
605.042	165 277.8	55	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	3/2	0.005	93TAU
605.842	165 059.5	6	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)5d$	^2P	3/2	0.005	93TAU
607.231	164 682.0	2	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s5p^4$	^2P	1/2	0.005	93TAU
611.274	163 592.8	20	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2D	3/2	0.005	93TAU
614.002	162 865.9	65	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	1/2	0.005	93TAU
614.044	162 854.8	65	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2D	3/2	0.005	93TAU
614.351	162 773.4	60	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2F	5/2	0.005	93TAU
616.028	162 330.3	52	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^1S)5d$	^2D	3/2	0.005	93TAU
619.249	161 485.9	55	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)5d$	^2D	5/2	0.005	93TAU
619.449	161 433.8	70	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	3/2	0.005	93TAU
623.406	160 409.1	75	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^2F	7/2	0.005	93TAU
624.086	160 234.3	5	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^1D)5d$	^2S	1/2	0.005	93TAU
625.177	159 954.7	40b	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^2P	3/2	0.005	93TAU
626.402	159 641.9	85	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	5/2	0.005	93TAU
626.473	159 623.8	50	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2P	1/2	0.005	93TAU
630.473	158 611.1	50	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)5d$	^2D	3/2	0.005	93TAU
630.797	158 529.6	65	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^2F	5/2	0.005	93TAU
636.051	157 220.1	65	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	5/2	0.005	93TAU

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
636.117	157 203.8	60	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	1/2	0.005	93TAU
642.123	155 733.4	75	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2D	5/2	0.005	93TAU
642.215	155 711.1	60	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)6s$	^2P	3/2	0.005	93TAU
646.339	154 717.6	50	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1S)5d$	^2D	3/2	0.005	93TAU
647.110	154 533.2	60	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^1D)5d$	^2P	3/2	0.005	93TAU
647.764	154 377.2	75	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1S)5d$	^2D	5/2	0.005	93TAU
649.614	153 937.6	50	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^2P	1/2	0.005	93TAU
653.695	152 976.5	80	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)6s$	^4P	5/2	0.005	93TAU
654.765	152 726.6	65	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s5p^4$	^2P	3/2	0.005	93TAU
655.220	152 620.5	55	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2S	1/2	0.005	93TAU
657.83	152 015.	0.5	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	3/2	0.01	91REY
658.333	151 898.8	40	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)6s$	^2D	3/2	0.005	93TAU
660.111	151 489.7	50	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^2D	5/2	0.005	93TAU
663.410	150 736.3	20	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^2S	1/2	0.005	93TAU
664.912	150 395.8	25	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)6s$	^2D	5/2	0.005	93TAU
665.212	150 328.0	70	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2D	3/2	0.005	93TAU
667.049	149 914.0	65	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s5p^4$	^2P	1/2	0.005	93TAU
668.462	149 597.1	25b	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	1/2	0.005	93TAU
672.565	148 684.5	75	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	5/2	0.005	93TAU
673.480	148 482.5	70	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s5p^4$	^2P	3/2	0.005	93TAU
674.906	148 168.8	30	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	3/2	0.005	93TAU
675.284	148 085.8	30	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^1D)5d$	^2D	3/2	0.005	93TAU
676.742	147 766.8	25	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)6s$	^4P	3/2	0.005	93TAU
680.647	146 919.0	35	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2P	3/2	0.005	93TAU
683.180	146 374.3	35	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	5/2	0.005	93TAU
683.971	146 205.0	70	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	3/2	0.005	93TAU
684.543	146 082.9	75	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^2D	3/2	0.005	93TAU
688.784	145 183.4	45	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)6s$	^2P	3/2	0.005	93TAU
689.147	145 107.	0	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	1/2	0.01	81HUM
690.33	144 858.	4	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^1D)5d$	^2P	1/2	0.01	91REY
694.756	143 935.4	40	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	1/2	0.005	93TAU
697.607	143 347.2	50	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2D	5/2	0.005	93TAU
698.552	143 153.3	80b	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)5d$	^2G	7/2	0.005	93TAU
703.583	142 129.6	60	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4P	5/2	0.005	93TAU
705.094	141 825.1	65	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2F	5/2	0.005	93TAU
711.896	140 470.0	2	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2D	3/2	0.005	93TAU
718.54	139 171.1	8	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)6s$	^2P	1/2	0.01	91REY
722.798	138 351.2	75	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4D	7/2	0.005	93TAU
724.865	137 956.7	30	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s5p^4$	^2P	3/2	0.005	93TAU
728.640	137 242.0	45	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2P	1/2	0.005	93TAU
731.028	136 793.7	40b	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2P	1/2	0.005	93TAU
732.627	136 495.1	75	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4F	5/2	0.005	93TAU
737.685	135 559.2	40	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)5d$	^2D	3/2	0.005	93TAU
738.460	135 416.9	60	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	5/2	0.005	93TAU
740.849	134 980.3	40	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4F	3/2	0.005	93TAU
741.621	134 839.8	0	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)6s$	^4P	5/2	0.01	81HUM
749.642	133 397.0	20	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)5d$	^4P	3/2	0.005	93TAU
751.727	133 027.0	50	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2P	3/2	0.005	93TAU
752.236	132 937.0	60	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	3/2	0.005	93TAU
758.495	131 840.0	55	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	1/2	0.005	93TAU
762.352	131 173.0	52	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4D	5/2	0.005	93TAU
767.208	130 342.7	5	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s5p^4$	^2P	3/2	0.005	93TAU
774.196	129 166.3	1	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)6s$	^4P	1/2	0.005	93TAU
777.035	128 694.3	50	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4D	3/2	0.005	93TAU
777.876	128 555.2	15	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^1D)5d$	^2F	5/2	0.005	93TAU
781.58	127 946.0	6	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2D	3/2	0.01	91REY
784.324	127 498.3	45	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)5d$	^2F	7/2	0.005	93TAU
795.000	125 786.2	20	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4P	3/2	0.005	93TAU
796.974	125 474.6	25	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^2D	5/2	0.005	93TAU
804.410	124 314.7	20b	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^1D)5d$	^2F	5/2	0.005	93TAU

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
805.695	124 116.4	75b	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4F	7/2	0.005	93TAU
809.533	123 528.0	60	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2P	1/2	0.005	93TAU
811.504	123 228.0	62	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4F	5/2	0.005	93TAU
814.994	122 700.3	35	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s5p^4$	^2S	1/2	0.005	93TAU
820.166	121 926.5	4	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^2D	3/2	0.01	81HUM
821.611	121 712.1	35	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4F	3/2	0.005	93TAU
835.005	119 759.8	45	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2P	3/2	0.005	93TAU
840.439	118 985.4	25	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4F	5/2	0.005	93TAU
846.23	118 171.2	0.5	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)5d$	^4D	3/2	0.01	91REY
851.286	117 469.3	65	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^4F	3/2	0.005	93TAU
854.189	117 070.1	25	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)5d$	^4D	1/2	0.005	93TAU
865.673	115 517.1	55	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s^25p^2(^3P)5d$	^2P	3/2	0.005	93TAU
868.903	115 087.6	35	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s5p^4$	^2S	1/2	0.005	93TAU
880.04	113 631.2	11	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
891.185	112 210.1	40	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s5p^4$	^2D	5/2	0.005	93TAU
904.51	110 557.1	8	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4D	3/2	0.01	91REY
908.38	110 086.1	3	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
915.296	109 254.3	80	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^4P	1/2	0.005	93TAU
915.60	109 218.0	9	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
917.79	108 957.4	6	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
919.466	108 758.8	30	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)5d$	^2P	1/2	0.005	93TAU
920.298	108 660.5	82	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s5p^4$	^2D	3/2	0.005	93TAU
926.242	107 963.1	82	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s5p^4$	^2D	5/2	0.005	93TAU
931.17	107 391.8	8	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
934.15	107 049.2	9	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
935.253	106 922.9	85	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^4P	3/2	0.005	93TAU
939.87	106 397.7	7	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
952.470	104 990.2	15	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s^25p^2(^3P)5d$	^2P	3/2	0.005	93TAU
957.707	104 416.1	30	$5s^25p^3$	$^2D^\circ$	5/2	–	$5s5p^4$	^2D	3/2	0.005	93TAU
968.18	103 286.6	7	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
974.95	102 569.4	4	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
983.29	101 699.4	1	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
986.55	101 363.3	9	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
988.673	101 145.7	40	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2P	1/2	0.005	93TAU
991.85	100 821.7	1	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
999.11	100 089.1	6	$5s5p^4$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
1002.67	99 733.7	11	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1003.380	99 663.1	95	$5s^25p^3$	$^4S^\circ$	3/2	–	$5s5p^4$	^4P	5/2	0.005	93TAU
1006.731	99 331.4	6	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^4F	3/2	0.005	93TAU
1008.68	99 139.5	6	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1009.43	99 065.8	6	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
1009.86	99 023.6	2	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
1018.81	98 153.7	9	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
1026.945	97 376.2	6	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s^25p^2(^3P)5d$	^2P	3/2	0.005	93TAU
1028.63	97 216.7	12	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
1030.28	97 061.0	10	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1032.99	96 806.4	2	$5s5p^4$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1034.54	96 661.3	5	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
1041.813	95 986.5	9	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s5p^4$	^4P	1/2	0.01	86DIR
1061.44	94 211.6	6	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
1062.65	94 104.4	6	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
1064.11	93 975.2	6	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
1065.056	93 891.8	20	$5s^25p^3$	$^2P^\circ$	1/2	–	$5s5p^4$	^2D	3/2	0.005	93TAU
1067.695	93 659.7	25	$5s^25p^3$	$^2D^\circ$	3/2	–	$5s5p^4$	^4P	3/2	0.005	93TAU
1068.81	93 562.0	5	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
1069.21	93 527.0	5	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
1081.39	92 473.6	8	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1083.25	92 314.8	1	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	0.01	95GAL
1084.66	92 194.8	11	$5s5p^4$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
1089.65	91 772.6	6	$5s5p^4$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1091.16	91 645.6	3	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	1/2	0.01	95GAL
1097.35	91 128.6	12	$5s5p^4$	^{4}P	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	3/2	0.01	95GAL
1102.95	90 665.9	4	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	3/2	0.01	95GAL
1108.91	90 178.6	13	$5s5p^4$	^{4}P	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}G°	7/2	0.01	95GAL
1113.291	89 823.8	70	$5s^25p^3$	^{2}P°	3/2	–	$5s5p^4$	^{2}D	5/2	0.005	93TAU
1113.57	89 801.3	3	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}D°	3/2	0.01	95GAL
1114.44	89 731.2	5	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	1/2	0.01	95GAL
1116.29	89 582.5	8	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}F°	5/2	0.01	95GAL
1117.09	89 518.3	1	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^1$D$)6p$	^{2}P°	3/2	0.01	95GAL
1118.417	89 412.1	35	$5s^25p^3$	^{2}D°	5/2	–	$5s5p^4$	^{4}P	3/2	0.005	93TAU
1125.35	88 861.2	11	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	3/2	0.01	95GAL
1138.06	87 868.8	6	$5s5p^4$	^{4}P	5/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	7/2	0.01	95GAL
1139.44	87 762.4	2	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^1$D$)4f$	^{2}P°	1/2	0.01	95GAL
1143.25	87 469.9	4	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)6p$	^{2}D°	3/2	0.01	95GAL
1144.16	87 400.4	9	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	1/2	0.01	95GAL
1148.71	87 054.2	4	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^1$D$)6p$	^{2}P°	1/2	0.01	95GAL
1150.26	86 936.9	5	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}S°	1/2	0.01	95GAL
1151.08	86 874.9	10	$5s^25p^2(^3$P$)5d$	^{4}D	5/2	–	$5s^25p^2(^1$S$)6p$	^{2}P°	3/2	0.01	95GAL
1153.51	86 691.9	6	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	5/2	0.01	95GAL
1154.67	86 604.8	3	$5s^25p^2(^3$P$)5d$	^{4}D	3/2	–	$5s^25p^2(^1$S$)6p$	^{2}P°	1/2	0.01	95GAL
1155.65	86 531.4	8	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	3/2	0.01	95GAL
1157.468	86 395.5	65	$5s^25p^3$	^{2}D°	3/2	–	$5s5p^4$	^{4}P	5/2	0.005	93TAU
1159.046	86 277.9	2	$5s^25p^3$	^{2}P°	3/2	–	$5s5p^4$	^{2}D	3/2	0.01	86DIR
1163.14	85 974.2	1	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^1$D$)4f$	^{2}D°	5/2	0.01	95GAL
1174.70	85 128.1	5	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	5/2	0.01	95GAL
1175.71	85 055.0	10	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	5/2	0.01	95GAL
1177.37	84 935.1	10	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}F°	3/2	0.01	95GAL
1181.95	84 605.9	5	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)6p$	^{2}S°	1/2	0.01	95GAL
1188.61	84 131.9	9	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}P°	3/2	0.01	95GAL
1190.18	84 020.9	4	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^1$D$)4f$	^{2}D°	5/2	0.01	95GAL
1190.57	83 993.4	2	$5s^25p^2(^3$P$)5d$	^{2}P	1/2	–	$5s^25p^2(^1$D$)4f$	^{2}P°	1/2	0.01	95GAL
1190.98	83 964.5	3	$5s^25p^2(^1$D$)5d$	^{2}F	7/2	–	$5s^25p^2(^1$S$)4f$	^{2}F°	7/2	0.01	95GAL
1192.13	83 883.5	3	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	5/2	0.01	95GAL
1192.32	83 870.1	6	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	3/2	0.01	95GAL
1200.81	83 277.1	9	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	5/2	0.01	95GAL
1201.63	83 220.3	3	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	7/2	0.01	95GAL
1202.69	83 146.9	8	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	5/2	0.01	95GAL
1203.17	83 113.8	6	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	3/2	0.01	95GAL
1205.07	82 982.7	1	$5s^25p^2(^3$P$)5d$	^{4}F	9/2	–	$5s^25p^2(^1$S$)4f$	^{2}F°	7/2	0.01	95GAL
1210.60	82 603.7	6	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)4f$	^{4}F°	3/2	0.01	95GAL
1211.30	82 555.9	9	$5s5p^4$	^{4}P	5/2	–	$5s^25p^2(^3$P$)4f$	^{4}G°	7/2	0.01	95GAL
1212.04	82 505.5	5	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}D°	5/2	0.01	95GAL
1217.257	82 151.9	55	$5s^25p^3$	^{2}D°	5/2	–	$5s5p^4$	^{4}P	5/2	0.005	93TAU
1220.56	81 929.6	5	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	5/2	0.01	95GAL
1222.53	81 797.6	9	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	5/2	0.01	95GAL
1225.76	81 582.0	2	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	5/2	0.01	95GAL
1226.42	81 538.1	6	$5s5p^4$	^{4}P	1/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	3/2	0.01	95GAL
1230.94	81 238.7	9	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}G°	7/2	0.01	95GAL
1231.263	81 217.4	25	$5s^25p^3$	^{2}P°	1/2	–	$5s5p^4$	^{4}P	1/2	0.005	93TAU
1240.90	80 586.7	8	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)6p$	^{2}P°	3/2	0.01	95GAL
1242.42	80 488.1	5	$5s5p^4$	^{4}P	5/2	–	$5s^25p^2(^3$P$)4f$	^{4}G°	5/2	0.01	95GAL
1243.56	80 414.3	11	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	5/2	0.01	95GAL
1254.22	79 730.8	3	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	5/2	0.01	95GAL
1255.57	79 645.1	5	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	3/2	0.01	95GAL
1259.57	79 392.2	6	$5s^25p^2(^3$P$)5d$	^{4}D	1/2	–	$5s^25p^2(^1$D$)6p$	^{2}P°	3/2	0.01	95GAL
1262.85	79 186.0	5	$5s5p^4$	^{4}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	1/2	0.01	95GAL
1263.76	79 128.9	3	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}F°	5/2	0.01	95GAL
1266.29	78 970.9	8	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	1/2	0.01	95GAL
1271.21	78 665.2	7	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	3/2	0.01	95GAL
1272.96	78 557.1	7	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}D°	5/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1280.54	78 092.1	3	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1283.81	77 893.1	1	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1290.72	77 476.1	10	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
1290.86	77 467.7	5	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1298.46	77 014.3	2	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
1301.17	76 853.9	3	$5s5p^4$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
1321.27	75 684.8	3	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^1D)4f$	$^2P^\circ$	1/2	0.01	95GAL
1322.50	75 614.4	5	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	7/2	0.01	95GAL
1322.87	75 593.2	7	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
1328.27	75 285.9	3	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
1331.81	75 085.8	3	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
1333.77	74 975.4	3	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
1336.98	74 795.4	8	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1338.23	74 725.6	2	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
1338.57	74 706.6	9	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1340.90	74 576.8	8	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
1344.74	74 363.8	7	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
1345.61	74 315.7	3	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
1350.82	74 029.1	8	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
1351.36	73 999.5	3	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
1351.53	73 990.2	6	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
1352.78	73 921.8	5	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1353.65	73 874.3	2	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
1354.01	73 854.7	2	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
1355.74	73 760.5	9	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
1358.637	73 603.2	10	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s5p^4$	^4P	1/2	0.01	86DIR
1361.15	73 467.3	8	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
1365.61	73 227.3	9	$5s5p^4$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
1367.78	73 111.2	1	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^1S)4f$	$^2F^\circ$	7/2	0.01	95GAL
1369.24	73 033.2	4	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1378.42	72 546.8	9	$5s^25p^2(^3P)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
1384.50	72 228.2	1	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	7/2	0.01	95GAL
1385.48	72 177.2	9	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
1387.43	72 075.7	8	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
1390.22	71 931.1	6	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
1390.61	71 910.9	4	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
1390.84	71 899.0	2	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
1401.02	71 376.6	3	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
1403.064	71 272.6	10	$5s^25p^3$	$^2P^\circ$	3/2	–	$5s5p^4$	^4P	3/2	0.01	86DIR
1403.54	71 248.4	1	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	7/2	0.01	95GAL
1406.23	71 112.1	6	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
1406.86	71 080.3	9	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1407.76	71 034.8	9	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
1407.83	71 031.3	8*	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1407.83	71 031.3	8*	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
1411.42	70 850.6	9	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
1414.34	70 704.4	5	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
1417.24	70 559.7	5	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
1422.14	70 316.6	7	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
1422.27	70 310.1	7	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
1422.86	70 281.0	5	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
1424.02	70 223.7	1	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
1427.48	70 053.5	4	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^1D)4f$	$^2P^\circ$	1/2	0.01	95GAL
1429.70	69 944.7	3	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
1430.02	69 929.1	12	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
1437.50	69 565.2	3*	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
1437.50	69 565.2	3*	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1440.54	69 418.4	4	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
1444.79	69 214.2	5	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
1445.95	69 158.7	2	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1452.15	68 863.4	7	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	3/2	0.01	95GAL
1455.42	68 708.7	7	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	5/2	0.01	95GAL
1463.88	68 311.6	1	$5s^25p^2(^1$D$)5d$	^{2}G	7/2	–	$5s^25p^2(^1$S$)4f$	^{2}F°	7/2	0.01	95GAL
1465.73	68 225.4	9	$5s^25p^2(^3$P$)5d$	^{4}D	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	5/2	0.01	95GAL
1470.58	68 000.4	5	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}S°	3/2	0.01	95GAL
1478.33	67 643.9	6	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	3/2	0.01	95GAL
1480.78	67 532.0	8	$5s^25p^2(^3$P$)6s$	^{4}P	3/2	–	$5s^25p^2(^1$S$)6p$	^{2}P°	1/2	0.01	95GAL
1482.45	67 455.9	9	$5s^25p^2(^3$P$)5d$	^{4}D	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	3/2	0.01	95GAL
1484.93	67 343.2	9	$5s^25p^2(^3$P$)5d$	^{2}P	1/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	3/2	0.01	95GAL
1486.05	67 292.5	3	$5s^25p^2(^3$P$)6s$	^{4}P	1/2	–	$5s^25p^2(^1$D$)6p$	^{2}P°	3/2	0.01	95GAL
1493.87	66 940.2	5	$5s^25p^2(^3$P$)5d$	^{4}D	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}F°	5/2	0.01	95GAL
1496.65	66 815.9	5	$5s5p^4$	^{2}P	3/2	–	$5s^25p^2(^1$S$)6p$	^{2}P°	1/2	0.01	95GAL
1497.09	66 796.3	9	$5s^25p^2(^1$D$)5d$	^{2}F	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	5/2	0.01	95GAL
1497.19	66 791.8	10	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	5/2	0.01	95GAL
1506.41	66 383.0	6	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)4f$	^{4}F°	3/2	0.01	95GAL
1506.72	66 369.3	6	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	3/2	0.01	95GAL
1514.08	66 046.7	1	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}S°	3/2	0.01	95GAL
1517.03	65 918.3	10	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	1/2	0.01	95GAL
1524.28	65 604.7	1	$5s^25p^2(^3$P$)6s$	^{2}P	1/2	–	$5s^25p^2(^1$S$)6p$	^{2}P°	1/2	0.01	95GAL
1526.46	65 511.1	2	$5s^25p^2(^1$D$)5d$	^{2}G	9/2	–	$5s^25p^2(^1$S$)4f$	^{2}F°	7/2	0.01	95GAL
1528.97	65 403.5	3	$5s5p^4$	^{2}S	1/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	3/2	0.01	95GAL
1530.98	65 317.6	7	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	3/2	0.01	95GAL
1541.10	64 888.7	10	$5s^25p^2(^1$D$)5d$	^{2}F	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}G°	7/2	0.01	95GAL
1541.90	64 855.0	6	$5s^25p^2(^3$P$)5d$	^{4}P	5/2	–	$5s^25p^2(^1$D$)6p$	^{2}P°	3/2	0.01	95GAL
1548.20	64 591.1	9	$5s^25p^2(^3$P$)5d$	^{4}F	7/2	–	$5s^25p^2(^1$D$)4f$	^{2}G°	9/2	0.01	95GAL
1549.62	64 531.9	7	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}S°	3/2	0.01	95GAL
1552.41	64 416.0	8	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	3/2	0.01	95GAL
1553.58	64 367.5	5	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}G°	7/2	0.01	95GAL
1556.86	64 231.9	9	$5s^25p^2(^3$P$)5d$	^{2}P	1/2	–	$5s^25p^2(^3$P$)6p$	^{4}S°	3/2	0.01	95GAL
1558.11	64 180.3	8	$5s5p^4$	^{2}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	1/2	0.01	95GAL
1562.192	64 012.6	10	$5s^25p^3$	^{2}P°	3/2	–	$5s5p^4$	^{4}P	5/2	0.01	86DIR
1562.73	63 990.6	10	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^3$P$)6p$	^{2}D°	5/2	0.01	95GAL
1563.41	63 962.7	8	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	5/2	0.01	95GAL
1566.08	63 853.7	10	$5s^25p^2(^3$P$)5d$	^{4}D	7/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	7/2	0.01	95GAL
1569.91	63 697.9	5	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}D°	3/2	0.01	95GAL
1571.64	63 627.8	7	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	1/2	0.01	95GAL
1572.09	63 609.6	3	$5s^25p^2(^1$D$)5d$	^{2}F	7/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	5/2	0.01	95GAL
1572.52	63 592.2	8	$5s^25p^2(^3$P$)5d$	^{4}F	7/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	7/2	0.01	95GAL
1572.82	63 580.1	4	$5s^25p^2(^3$P$)5d$	^{4}F	7/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	5/2	0.01	95GAL
1575.34	63 478.4	10	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}F°	5/2	0.01	95GAL
1577.47	63 392.6	3	$5s^25p^2(^1$D$)5d$	^{2}F	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	7/2	0.01	95GAL
1577.77	63 380.6	8	$5s^25p^2(^1$D$)5d$	^{2}F	5/2	–	$5s^25p^2(^1$D$)4f$	^{2}F°	5/2	0.01	95GAL
1581.13	63 245.9	9	$5s5p^4$	^{2}D	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	5/2	0.01	95GAL
1583.85	63 137.3	5*	$5s^25p^2(^3$P$)5d$	^{4}D	7/2	–	$5s^25p^2(^1$D$)4f$	^{2}D°	5/2	0.01	95GAL
1583.85	63 137.3	5*	$5s^25p^2(^3$P$)5d$	^{4}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}P°	1/2	0.01	95GAL
1589.78	62 901.8	1	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	3/2	0.01	95GAL
1593.44	62 757.3	5	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}D°	3/2	0.01	95GAL
1597.43	62 600.6	3	$5s^25p^2(^3$P$)5d$	^{2}P	1/2	–	$5s^25p^2(^3$P$)4f$	^{2}D°	3/2	0.01	95GAL
1601.35	62 447.3	5	$5s^25p^2(^3$P$)5d$	^{4}F	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	5/2	0.01	95GAL
1602.19	62 414.6	7	$5s^25p^2(^3$P$)5d$	^{4}D	3/2	–	$5s^25p^2(^3$P$)4f$	^{2}F°	5/2	0.01	95GAL
1604.14	62 338.7	6	$5s^25p^2(^3$P$)6s$	^{2}P	3/2	–	$5s^25p^2(^1$S$)6p$	^{2}P°	3/2	0.01	95GAL
1619.57	61 744.8	6	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}D°	3/2	0.01	95GAL
1620.70	61 701.7	1	$5s^25p^2(^1$D$)5d$	^{2}F	7/2	–	$5s^25p^2(^1$D$)4f$	^{2}G°	7/2	0.01	95GAL
1625.33	61 526.0	1	$5s^25p^2(^3$P$)5d$	^{4}F	3/2	–	$5s^25p^2(^3$P$)4f$	^{4}F°	5/2	0.01	95GAL
1630.62	61 326.4	6	$5s^25p^2(^3$P$)5d$	^{4}F	7/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	7/2	0.01	95GAL
1635.94	61 126.9	3	$5s^25p^2(^1$D$)5d$	^{2}F	5/2	–	$5s^25p^2(^3$P$)6p$	^{4}D°	7/2	0.01	95GAL
1638.07	61 047.5	10	$5s^25p^2(^3$P$)5d$	^{4}D	7/2	–	$5s^25p^2(^1$D$)6p$	^{2}D°	5/2	0.01	95GAL
1641.99	60 901.7	4	$5s^25p^2(^3$P$)5d$	^{2}D	3/2	–	$5s^25p^2(^1$D$)6p$	^{2}P°	3/2	0.01	95GAL
1643.38	60 850.2	6	$5s^25p^2(^3$P$)5d$	^{4}D	3/2	–	$5s^25p^2(^3$P$)6p$	^{4}P°	5/2	0.01	95GAL
1643.83	60 833.5	10	$5s^25p^2(^3$P$)5d$	^{2}P	3/2	–	$5s^25p^2(^3$P$)6p$	^{2}S°	1/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1644.63	60 803.9	3	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
1654.22	60 451.5	6	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	9/2	0.01	95GAL
1660.32	60 229.4	5	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1660.46	60 224.3	7	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	9/2	0.01	95GAL
1661.00	60 204.7	1	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	7/2	0.01	95GAL
1661.29	60 194.2	6	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
1664.59	60 074.9	3	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1666.37	60 010.7	6	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
1668.43	59 936.6	5	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
1668.65	59 928.7	1	$5s^25p^2(^3P)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1668.90	59 919.7	3	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
1670.60	59 858.7	3	$5s^25p^2(^3P)5d$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
1670.70	59 855.2	6	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1671.41	59 829.7	5	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
1673.30	59 762.1	7	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
1680.17	59 517.8	11	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
1686.65	59 289.1	1	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
1688.44	59 226.3	6	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	7/2	0.01	95GAL
1693.40	59 052.8	5	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1693.92	59 034.7	1	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
1694.95	58 998.8	7	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
1698.36	58 880.3	11	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
1698.89	58 862.0	10	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
1704.68	58 662.0	12	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
1706.29	58 606.7	11	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
1709.30	58 503.5	9	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
1713.15	58 372.0	15	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
1714.18	58 336.9	12	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
1717.52	58 223.5	12	$5s5p^4$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
1723.30	58 028.2	10	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
1725.92	57 940.1	12	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
1726.11	57 933.7	12	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
1731.15	57 765.1	13	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
1742.89	57 376.0	12	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1744.64	57 318.4	15	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
1746.17	57 268.2	2	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
1747.78	57 215.4	9	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
1750.73	57 119.0	12	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
1752.40	57 064.6	1	$5s^25p^2(^3P)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
1755.61	56 960.3	14	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
1758.16	56 877.6	12	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
1762.29	56 744.3	10	$5s5p^4$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
1769.29	56 519.8	10	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
1783.00	56 085.2	12	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	9/2	0.01	95GAL
1788.21	55 921.8	10	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
1791.73	55 812.0	11	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
1792.32	55 793.6	13	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
1802.41	55 481.3	3	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	0.01	95GAL
1802.61	55 475.1	15	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
1803.26	55 455.1	15	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
1804.90	55 404.7	10	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
1806.29	55 362.1	6	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
1807.55	55 323.5	1	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
1819.49	54 960.5	12	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
1821.48	54 900.4	10	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1824.12	54 821.0	12	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
1824.76	54 801.7	5	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
1828.39	54 692.9	12	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
1828.77	54 681.6	10	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
1834.85	54 500.4	1	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1841.73	54 296.8	11	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
1841.91	54 291.5	12	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1842.31	54 279.7	6	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
1842.77	54 266.1	10	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
1848.70	54 092.1	11	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
1851.99	53 996.0	2	$5s^25p^2(^3P)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
1859.52	53 777.3	10	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	7/2	0.01	95GAL
1860.82	53 739.7	11	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
1872.55	53 403.1	31	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
1874.55	53 346.1	4	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
1880.05	53 190.1	3	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1883.89	53 081.7	12	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
1891.24	52 875.4	6	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
1895.48	52 757.1	12	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
1896.21	52 736.8	7	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
1910.50	52 342.3	12	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
1914.81	52 224.5	8	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
1917.95	52 139.0	4	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
1922.00	52 029.1	6	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
1937.27	51 619.0	5	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1937.76	51 606.0	4	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
1939.90	51 549.0	5	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
1941.94	51 494.9	3	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
1948.79	51 313.9	4	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
1950.21	51 276.5	5	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
1953.41	51 192.5	10	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
1955.86	51 128.4	9	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
1958.74	51 053.2	5	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^1S)4f$	$^2F^\circ$	7/2	0.01	95GAL
1959.37	51 036.8	6	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	0.01	95GAL
1965.81	50 869.6	1	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
1966.61	50 848.9	9	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
1971.76	50 716.1	10	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
1971.93	50 711.7	11	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
1973.23	50 678.3	1	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
1979.48	50 518.3	11	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
1982.23	50 448.2	3	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
1985.97	50 353.2	10	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	9/2	0.01	95GAL
1986.28	50 345.4	3	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
1988.10	50 299.3	9	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
1988.46	50 290.2	1	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
1989.73	50 258.1	9	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
1990.43	50 240.4	1	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
1993.55	50 161.8	10	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
1998.66	50 033.5	7	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
2000.00	50 000.0	1	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2000.36	49 974.8	4	$5s^25p^2(^1D)5d$	^2D	5/2	–	$5s^25p^2(^1S)4f$	$^2F^\circ$	7/2	0.01	95GAL
2014.27	49 629.7	6	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
2026.06	49 341.0	11	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2030.81	49 225.6	1	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
2041.08	48 977.9	9	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2041.50	48 967.9	8	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
2046.16	48 856.4	10	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2050.42	48 754.9	9	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
2054.44	48 659.5	9	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
2060.70	48 511.7	4	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2063.05	48 456.4	1*	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
2063.05	48 456.4	1*	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
2081.93	48 017.1	11	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
2084.60	47 955.6	9	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2086.63	47 908.9	9*	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
2086.63	47 908.9	9*	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
2090.47	47 820.9	7	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
2094.04	47 739.4	1	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
2097.78	47 654.3	6	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
2098.40	47 640.2	12	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
2108.42	47 413.9	12	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
2118.45	47 189.4	11	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
2118.58	47 186.5	11	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2121.38	47 124.2	8	$5s^25p^2(^3P)5d$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
2122.50	47 099.4	9	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
2123.05	47 087.2	9	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
2123.82	47 070.1	6	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
2128.48	46 967.1	1	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	0.01	95GAL
2129.96	46 934.4	1	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2131.71	46 895.9	5	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
2133.34	46 860.1	10	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
2144.01	46 626.9	13	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	9/2	0.01	95GAL
2150.91	46 477.3	8	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
2153.64	46 418.4	9	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2154.90	46 391.3	12	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
2170.99	46 047.5	3	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
2173.82	45 987.6	9	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
2185.26	45 746.8	10	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
2186.41	45 722.8	11	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
2187.09	45 708.6	11	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	0.01	95GAL
2188.14	45 686.6	9	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
2189.83	45 651.4	11	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
2191.24	45 622.0	3	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
2194.12	45 562.1	4	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2208.56	45 264.3	7	$5s^25p^2(^1D)6s$	^2D	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
2212.08	45 192.2	3	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	3/2	0.01	95GAL
2213.13	45 170.8	9	$5s^25p^2(^3P)5d$	^4F	3/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
2219.22	45 046.9	3	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
2220.34	45 024.1	12	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2229.91	44 830.9	8	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
2240.12	44 626.61	10	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2240.34	44 622.23	9	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
2242.15	44 586.21	8	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
2244.50	44 539.54	10*	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2244.50	44 539.54	10*	$5s^25p^2(^1D)5d$	^2S	1/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
2246.64	44 497.11	1	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2274.13	43 959.28	5	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
2279.76	43 850.73	1	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
2281.22	43 822.66	7	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2283.96	43 770.10	9	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2287.13	43 709.44	5	$5s^25p^2(^1D)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
2287.91	43 694.54	9	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
2288.90	43 675.64	12	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
2289.96	43 655.42	9	$5s^25p^2(^3P)5d$	^4F	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
2306.19	43 348.22	1	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
2306.58	43 340.89	10	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2308.31	43 308.41	7	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
2311.42	43 250.15	3	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
2311.48	43 249.03	13	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
2314.40	43 194.46	2	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2315.56	43 172.83	1	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
2318.22	43 123.29	1	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
2320.60	43 079.07	1	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
2327.05	42 959.68	5	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
2331.40	42 879.53	0	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	85REY
2338.29	42 753.19	6	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	9/2	0.01	95GAL
2340.92	42 705.16	11	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2345.28	42 625.78	6	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2351.44	42 514.12	6	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
2355.44	42 441.93	7	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1S)6p$	$^2P^\circ$	1/2	0.01	95GAL
2364.13	42 285.93	4	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
2365.55	42 260.55	4	$5s^25p^2(^3P)5d$	^4F	9/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	9/2	0.01	95GAL
2369.38	42 192.25	1	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
2372.47	42 137.30	6	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
2372.86	42 130.37	3	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
2374.15	42 107.48	3	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
2384.37	41 927.01	2	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
2391.96	41 793.98	4	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
2394.31	41 752.97	5	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	7/2	0.01	95GAL
2415.61	41 384.83	9	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2422.12	41 273.61	9	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2428.97	41 157.22	10	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
2431.07	41 121.67	6	$5s5p^4$	^2S	1/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
2433.59	41 079.09	9	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
2438.08	41 003.45	2	$5s^25p^2(^3P)5d$	^4D	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
2446.08	40 869.35	8	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
2447.64	40 843.31	9*	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
2447.64	40 843.31	9*	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
2450.90	40 788.99	8	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
2451.37	40 781.17	9	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2459.75	40 642.24	3	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
2462.66	40 594.22	5	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
2465.75	40 543.35	5	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2470.74	40 461.47	3	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
2474.82	40 394.77	9	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
2493.05	40 099.41	9	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
2495.10	40 066.47	11	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2497.02	40 035.67	6	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
2498.06	40 019.00	2	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	85REY
2503.93	39 925.19	6	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2505.33	39 902.88	3	$5s^25p^2(^3P)5d$	^4D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
2514.69	39 754.37	6	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
2524.92	39 593.31	1	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2525.51	39 584.06	3	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
2529.58	39 520.37	3	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
2534.18	39 448.64	1	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	85REY
2559.94	39 051.71	10	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
2564.13	38 987.90	12	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
2572.93	38 854.56	10	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2573.36	38 848.06	2	$5s^25p^2(^3P)5d$	^4D	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	0.01	95GAL
2589.03	38 612.95	1	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	9/2	0.01	95GAL
2591.24	38 580.02	6	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
2594.83	38 526.65	1	$5s^25p^2(^3P)5d$	^4F	7/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
2608.33	38 327.26	2	$5s^25p^2(^1D)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
2619.70	38 160.92	11	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2621.78	38 130.65	11	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2626.98	38 055.17	9	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
2633.39	37 962.55	5	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
2650.91	37 711.67	3	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
2651.58	37 702.14	13	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2652.17	37 693.75	10	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
2665.13	37 510.47	10	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
2670.79	37 430.98	5	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2679.99	37 302.49	11	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
2691.74	37 139.67	4	$5s^25p^2(^1D)5d$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	85REY
2695.87	37 082.77	9	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
2697.51	37 060.23	13	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2706.73	36 934.00	10	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2709.97	36 889.84	1	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
2711.90	36 863.59	1	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	81GAL
2725.27	36 682.75	13	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
2733.92	36 566.69	2	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	81GAL
2744.08	36 431.31	10	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
2759.66	36 225.64	6	$5s^25p^2(^1D)5d$	^2S	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
2759.86	36 223.02	0	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	85REY
2761.35	36 203.47	1	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2767.58	36 121.98	15	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
2792.47	35 800.03	3	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
2796.58	35 747.42	10	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2803.46	35 659.70	2	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
2806.65	35 619.17	11	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
2810.46	35 570.89	10	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
2824.10	35 399.09	11	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
2828.31	35 346.40	1	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
2838.47	35 219.89	11	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
2845.06	35 138.31	10	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2850.50	35 071.26	10	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
2864.15	34 904.12	10	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
2879.79	34 714.57	12	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
2898.48	34 490.73	10	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
2900.44	34 467.43	13	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
2910.37	34 349.83	13	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
2929.25	34 128.45	9	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	3/2	0.01	95GAL
2952.61	33 858.45	3	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
2954.69	33 834.61	15	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
2955.89	33 820.88	12	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
2958.72	33 788.53	9	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
2967.12	33 692.88	2	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	85REY
2970.94	33 649.56	1	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
2976.44	33 587.38	14	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
2977.99	33 569.90	6	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
3014.02	33 168.62	1	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
3017.72	33 127.95	6	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
3024.43	33 054.46	6	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
3034.22	32 947.81	15	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
3036.97	32 917.98	12	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
3042.67	32 856.31	1	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
3044.26	32 839.15	16	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
3068.57	32 579.00	9	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
3074.48	32 516.38	2	$5s^25p^2(^1D)5d$	^2S	1/2	–	$5s^25p^2(^1D)4f$	$^2P^\circ$	1/2	0.01	95GAL
3076.16	32 498.62	1	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
3079.72	32 461.06	14	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
3083.05	32 426.00	6	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
3086.70	32 387.65	3	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	9/2	0.01	95GAL
3103.23	32 215.14	10	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
3105.62	32 190.35	11	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
3121.57	32 025.88	3	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
3125.76	31 982.95	13	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
3142.87	31 808.84	1	$5s^25p^2(^1D)5d$	^2S	1/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
3156.77	31 668.78	1	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	0.01	81GAL

Spectral lines of Xe IV—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3175.25	31 484.47	17	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
3179.27	31 444.67	15	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
3184.58	31 392.24	14	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
3199.32	31 247.61	1	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
3201.55	31 225.85	10	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
3207.79	31 165.11	2	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	81GAL
3209.40	31 149.47	13	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
3223.36	31 014.57	2	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
3225.49	30 994.09	9	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
3233.41	30 918.18	1	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
3239.30	30 861.96	16	$5s^25p^2(^1D)6s$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
3253.25	30 729.63	13	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
3256.66	30 697.45	9	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
3259.46	30 671.08	12	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
3260.67	30 659.70	1	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
3273.74	30 537.30	13	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
3276.59	30 510.74	1	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
3277.28	30 504.32	10	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
3285.98	30 423.56	15	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
3289.03	30 395.35	9	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
3303.32	30 263.86	8	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
3310.40	30 199.14	16	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
3322.19	30 091.97	4	$5s^25p^2(^1D)6s$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	81GAL
3332.83	29 995.90	18	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
3338.86	29 941.73	1	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
3339.19	29 938.77	1	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
3355.96	29 789.17	11	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
3364.68	29 711.97	4	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2P^\circ$	1/2	0.01	95GAL
3367.50	29 687.09	5	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	7/2	0.01	95GAL
3380.09	29 576.52	10	$5s^25p^2(^1D)6s$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
3386.75	29 518.36	14	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
3394.78	29 448.54	6	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
3426.42	29 176.61	5	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
3428.03	29 162.91	5	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
3431.54	29 133.08	13	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
3437.52	29 082.40	9	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
3450.74	28 970.99	4	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
3458.74	28 903.98	17	$5s^25p^2(^3P)6s$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
3472.48	28 789.62	8	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
3491.55	28 632.38	2	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	5/2	0.01	95GAL
3497.89	28 580.49	15	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
3498.19	28 578.04	6	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
3513.56	28 453.02	12	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
3522.36	28 381.94	1	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	0.01	95GAL
3537.41	28 261.19	12	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
3553.26	28 135.13	6	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
3556.49	28 109.58	12	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
3557.96	28 097.97	9	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
3560.36	28 079.03	1	$5s^25p^2(^1D)6s$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
3569.53	28 006.90	4	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
3584.50	27 889.93	1	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	0.01	95GAL
3587.29	27 868.24	9	$5s^25p^2(^1D)5d$	^2S	1/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
3587.67	27 865.29	11	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
3595.37	27 805.62	1	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
3606.05	27 723.27	3	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	85REY
3610.74	27 687.26	2	$5s^25p^2(^1D)6s$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
3612.01	27 677.52	5	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
3658.80	27 323.58	5	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
3663.88	27 285.70	13	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
3664.46	27 281.38	10	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3666.75	27 264.34	16	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
3676.01	27 195.66	6	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
3719.10	26 880.58	3	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	5/2	0.01	95GAL
3720.91	26 867.50	1b	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	7/2	0.01	81GAL
3732.66	26 782.93	12	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
3750.71	26 654.04	13	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
3761.44	26 578.01	4	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
3793.30	26 354.79	6	$5s^25p^2(^3P)5d$	^4D	7/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
3810.67	26 234.66	3	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
3817.38	26 188.54	6*	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	3/2	0.01	95GAL
3817.38	26 188.54	6*	$5s^25p^2(^1D)6s$	^2D	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	95GAL
3837.71	26 049.82	10	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
3842.80	26 015.31	1	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
3879.17	25 771.41	9	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2D^\circ$	3/2	0.01	95GAL
3886.72	25 721.35	11	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
3905.93	25 594.85	13	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
3918.57	25 512.29	11	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
3958.35	25 255.90	13	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1D)6p$	$^2F^\circ$	5/2	0.01	95GAL
3979.21	25 123.51	12	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
3994.42	25 027.85	13	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	7/2	0.01	95GAL
4001.18	24 985.56	12	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
4014.09	24 905.21	10	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
4032.91	24 788.99	9	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	9/2	0.01	95GAL
4034.85	24 777.07	6	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
4051.64	24 674.39	12	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
4055.43	24 651.33	5	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
4082.90	24 485.48	11	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	5/2	0.01	95GAL
4089.81	24 444.11	9	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
4207.08	23 762.76	1	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	85REY
4253.57	23 503.05	11	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
4255.92	23 490.07	15	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
4264.96	23 440.28	9	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
4278.51	23 366.05	0	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^1D)4f$	$^2D^\circ$	3/2	0.01	81GAL
4280.55	23 354.91	12	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	3/2	0.01	95GAL
4301.10	23 243.33	0h	$5s^25p^2(^3P)5d$	^4P	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	81GAL
4332.08	23 077.11	7	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
4356.26	22 949.02	15	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4P^\circ$	1/2	0.01	95GAL
4365.33	22 901.34	16	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
4373.88	22 856.57	1	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
4380.85	22 820.21	10	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	5/2	0.01	95GAL
4399.17	22 725.18	6	$5s5p^4$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
4428.26	22 575.89	10	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
4429.10	22 571.61	3	$5s^25p^2(^1D)6s$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	81GAL
4430.85	22 562.70	13	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
4587.78	21 790.93	8	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
4638.29	21 553.63	3	$5s^25p^2(^1D)5d$	^2G	7/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
4652.47	21 487.94	6	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	0.01	95GAL
4678.60	21 367.93	5	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	3/2	0.01	95GAL
4744.55	21 070.92	6	$5s^25p^2(^1D)5d$	^2S	1/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
4767.76	20 968.35	10	$5s^25p^2(^1D)5d$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
4797.05	20 840.32	5	$5s^25p^2(^3P)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2G^\circ$	7/2	0.01	95GAL
4799.71	20 828.77	1	$5s^25p^2(^3P)6s$	^4P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
4833.57	20 682.86	10	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
4843.90	20 638.76	5	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2S^\circ$	1/2	0.01	95GAL
4852.39	20 602.65	6	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
4868.81	20 533.16	3	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	1/2	0.01	95GAL
4874.67	20 508.48	1	$5s^25p^2(^3P)5d$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
4885.17	20 464.4	2	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.05	81GAL
4904.69	20 383.0	3	$5s^25p^2(^1D)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.05	81GAL
4924.24	20 302.03	5	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL

Spectral lines of Xe IV—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4995.44	20 012.7	1	$5s^25p^2(^1D)6s$	^2D	5/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.05	81GAL
5268.85	18 974.19	3	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	1/2	0.01	95GAL
5288.78	18 902.69	0	$5s^25p^2(^3P)6s$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	1/2	0.01	95GAL
5325.12	18 773.70	12	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	3/2	0.01	95GAL
5330.17	18 755.91	1*	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	5/2	0.01	95GAL
5330.17	18 755.91	1*	$5s^25p^2(^1D)5d$	^2G	9/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	7/2	0.01	95GAL
5341.31	18 716.79	5	$5s^25p^2(^3P)5d$	^4P	3/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
5377.65	18 590.31	1	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^3P)4f$	$^2F^\circ$	5/2	0.01	95GAL
5379.85	18 582.71	6	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	5/2	0.01	95GAL
5416.62	18 456.57	6	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4S^\circ$	3/2	0.01	95GAL
5432.74	18 401.80	6	$5s^25p^2(^3P)5d$	^2F	7/2	–	$5s^25p^2(^3P)4f$	$^4F^\circ$	7/2	0.01	95GAL
5483.83	18 230.37	3	$5s^25p^2(^3P)6s$	^4P	5/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
5580.31	17 915.18	9	$5s^25p^2(^1D)5d$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^2D^\circ$	5/2	0.01	95GAL
5606.01	17 833.05	10	$5s5p^4$	^2P	1/2	–	$5s^25p^2(^3P)4f$	$^4D^\circ$	3/2	0.01	95GAL
5689.64	17 570.93	2	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL
5992.71	16 682.32	3	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2G^\circ$	7/2	0.01	95GAL
6038.97	16 554.53	1	$5s^25p^2(^3P)5d$	^2D	3/2	–	$5s^25p^2(^3P)4f$	$^4G^\circ$	5/2	0.01	95GAL
6371.09	15 691.56	1	$5s^25p^2(^1S)5d$	^2D	3/2	–	$5s^25p^2(^3P)6p$	$^2P^\circ$	3/2	0.01	95GAL
6450.34	15 498.78	1	$5s^25p^2(^3P)6s$	^2P	3/2	–	$5s^25p^2(^3P)4f$	$^2D^\circ$	5/2	0.01	95GAL
6588.17	15 174.53	1	$5s^25p^2(^1S)5d$	^2D	5/2	–	$5s^25p^2(^1D)4f$	$^2F^\circ$	5/2	0.01	95GAL
6777.57	14 750.48	1	$5s^25p^2(^3P)5d$	^2F	5/2	–	$5s^25p^2(^3P)6p$	$^4D^\circ$	3/2	0.01	95GAL

4.5. Xe V

Sn isoelectronic sequence

Ground state

$1s^22s^22p^63s^23p^63d^{10}4s^24p^64d^{10}5s^25p^2\ ^3P_0$

Ionization energy 436 700±400 cm^{-1} (54.14±0.05 eV) [93TAU]

Analyses of the spectrum of four times ionized xenon, Xe V, were published in 1999 by Gallardo *et al.* [99GAL] and in 1993 by Tauheed *et al.* [93TAU]. We use the levels determined by Gallardo *et al.* [99GAL] which provide the most complete set available. However, we use the value of 234 455.6 cm^{-1} (rather than 234 459.6 cm^{-1}) for the value of the $5p6p\ ^3P_1$ level since that is the value that fits this level for all 16 lines involving it in their table of classified lines.

Gallardo *et al.* [99GAL] classified 233 lines and 198 classifications from this source are in our Xe V Line Table. The VUV was studied using a capillary pulsed discharge as the light source. The visible/near UV spectra were obtained using laser–tube-like sources. They estimate their wavelength uncertainty as 0.01 Å.

Tauheed *et al.* [93TAU] classified 73 VUV lines. They used a modified triggered spark initiated by a puff of xenon gas as their source. The quoted accuracy of their wavelength measurements is 0.005 Å.

These two data sets are the primary sources for our line list. Where duplicate lines exist, lines from [93TAU] were given first priority and [99GAL] had second priority. Two additional lines were taken from [94GAL] who used the same light sources as [99GAL] and quoted the same uncertainty. Additional sources of lines which were superseded by the first three sources and therefore did not contribute to our list were [94DUC] and [92PIN].

Six additional lines were quoted by [96LAR] from collision-based spectroscopy but were not included in our list due to the relatively large quoted uncertainty in the experimental measurement (0.5–1.0 Å).

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe V levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] with adjusted configuration average energies are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references and are not on a common scale.

The intensity codes given in the Xe V line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
b	blend
a	asymmetric
w	wide
*	two or more classifications of this line share the same intensity

The ionization energy was determined by Tauheed *et al.* [93TAU] by means of spectral analysis.

References

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

92PIN E. H. Pinnington, R. N. Gosselin, Q. Ji, J. A. Kernahan, and B. Guo, Phys. Scr. **46**, 40 (1992).

93TAU A. Tauheed, Y. N. Joshi, V. Kaufman, J. Sugar, and E. H. Pinnington, J. Opt. Soc. Am. B **10**, 561 (1993).

94DUC R. Duchowicz, D. Schinca, and M. Gallardo, IEEE J. Quantum Electron. **30**, 155 (1974).

94GAL M. Gallardo, M. Raineri, and J. G. Reyna Almandos, Z. Phys. D **30**, 261 (1994).

96LAR M. O. Larsson, A. M. Gonzalez, R. Hallin, F. Heijkenskjöld, B. Nyström, G. O'Sullivan, C. Weber, and A. Wännström, Phys. Scr. **53**, 317 (1996).

99GAL M. Gallardo, M. Raineri, J. G. Reyna Almandos, H. Sobral, and F. Callegari, J. Quant. Spectrosc. Radiat. Transfer **61**, 319 (1999).

Energy levels of Xe V

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.0	0	$5s^25p^2$	^{3}P	0	99GAL
9 291.8	0	$5s^25p^2$	^{3}P	1	99GAL
14 126.7	0	$5s^25p^2$	^{3}P	2	99GAL
28 411.2	0	$5s^25p^2$	^{1}D	2	99GAL
44 470.4	0	$5s^25p^2$	^{1}S	0	99GAL
92 182.8	1	$5s5p^3$	^{5}S°	2	99GAL
115 286.3	1	$5s5p^3$	^{3}D°	1	99GAL
116 097.0	1	$5s5p^3$	^{3}D°	2	99GAL
119 919.0	1	$5s5p^3$	^{3}D°	3	99GAL
133 408.1	1	$5s5p^3$	^{3}P°	0	99GAL
134 575.2	1	$5s5p^3$	^{3}P°	1	99GAL
134 702.7	1	$5s5p^3$	^{3}P°	2	99GAL
145 807.0	1	$5s5p^3$	^{1}D°	2	99GAL
155 518.1	1	$5s5p^3$	^{3}S°	1	99GAL
169 672.6	1	$5s5p^3$	^{1}P°	1	99GAL
156 506.8	1	$5s^25p(^2P°)5d$	^{3}F°	2	99GAL
160 630.4	1	$5s^25p(^2P°)5d$	^{3}F°	3	99GAL
169 799.4	1	$5s^25p(^2P°)5d$	^{3}F°	4	99GAL
170 987.6	1	$5s^25p(^2P°)5d$	^{3}P°	2	99GAL
173 071.7	1	$5s^25p(^2P°)5d$	^{3}D°	1	99GAL
181 004.3	1	$5s^25p(^2P°)5d$	^{3}D°	2	99GAL
182 167.2	1	$5s^25p(^2P°)5d$	^{3}D°	3	99GAL
183 025.2	1	$5s^25p(^2P°)5d$	^{3}P°	0	99GAL
184 147.6	1	$5s^25p(^2P°)5d$	^{3}P°	1	99GAL
185 795.0	1	$5s^25p(^2P°)5d$	^{1}D°	2	99GAL
194 138.0	1	$5s^25p(^2P°)5d$	^{1}F°	3	99GAL
199 959.0	1	$5s^25p(^2P°)5d$	^{1}P°	1	99GAL
186 746.7	0	$5s^25p(^2P°)4f$	^{3}G	3	99GAL
189 663.8	0	$5s^25p(^2P°)4f$	^{3}F	3	99GAL
190 644.7	0	$5s^25p(^2P°)4f$	^{3}F	4	99GAL
191 603.5	0	$5s^25p(^2P°)4f$	^{3}F	2	99GAL
200 010.2	0	$5s^25p(^2P°)4f$	^{1}F	3	99GAL
201 545.2	0	$5s^25p(^2P°)4f$	^{3}G	4	99GAL
202 281.8	0	$5s^25p(^2P°)4f$	^{3}G	5	99GAL
205 758.8	0	$5s^25p(^2P°)4f$	^{3}D	3	99GAL
207 366.7	0	$5s^25p(^2P°)4f$	^{3}D	2	99GAL
209 310.7	0	$5s^25p(^2P°)4f$	^{3}D	1	99GAL
214 317.7	0	$5s^25p(^2P°)4f$	^{1}G	4	99GAL
216 745.6	0	$5s^25p(^2P°)4f$	^{1}D	2	99GAL
194 033.1	1	$5s^25p(^2P°)6s$	^{3}P°	0	99GAL
194 232.9	1	$5s^25p(^2P°)6s$	^{3}P°	1	99GAL
209 068.9	1	$5s^25p(^2P°)6s$	^{3}P°	2	99GAL
213 040.2	1	$5s^25p(^2P°)6s$	^{1}P°	1	99GAL
228 064.9	0	$5s^25p(^2P°)6p$	^{3}D	1	99GAL
233 999.3	0	$5s^25p(^2P°)6p$	^{3}P	0	99GAL
234 455.6	0	$5s^25p(^2P°)6p$	^{3}P	1	
235 178.9	0	$5s^25p(^2P°)6p$	^{3}D	2	99GAL
243 216.5	0	$5s^25p(^2P°)6p$	^{1}P	1	99GAL
244 821.3	0	$5s^25p(^2P°)6p$	^{3}P	2	99GAL
246 208.0	0	$5s^25p(^2P°)6p$	^{3}D	3	99GAL
247 810.4	0	$5s^25p(^2P°)6p$	^{3}S	1	99GAL
250 557.2	0	$5s^25p(^2P°)6p$	^{1}D	2	99GAL
259 642.3	0	$5s^25p(^2P°)6p$	^{1}S	0	99GAL

Spectral lines of Xe v

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
500.108	199 956.8	22	$5s^25p^2$	^{3}P	0	–	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	0.005	93TAU
500.557	199 777.4	40	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	0.005	93TAU
502.731	198 913.5	20	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	0.005	93TAU
512.972	194 942.4	50	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	0.005	93TAU
514.852	194 230.6	40	$5s^25p^2$	^{3}P	0	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	0.005	93TAU
524.473	190 667.6	20	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	0.005	93TAU
538.120	185 832.2	90b	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	0.005	93TAU
540.717	184 939.6	20	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	0.005	93TAU
541.297	184 741.5	40	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	0	0.005	93TAU
541.628	184 628.6	40	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	0.005	93TAU
543.05	184 145.	10	$5s^25p^2$	^{3}P	0	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	0.01	99GAL
553.534	180 657.4	25	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	0.005	93TAU
555.227	180 106.5	45b	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	0.005	93TAU
555.522	180 010.9	50b	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^1F^\circ$	3	0.005	93TAU
566.57	176 501.	11	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	0.01	99GAL
571.898	174 856.4	55	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	0.005	93TAU
575.594	173 733.6	65	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	0	0.005	93TAU
577.797	173 071.2	75	$5s^25p^2$	^{3}P	0	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	0.005	93TAU
582.366	171 713.3	70	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	0.005	93TAU
582.514	171 669.7	45	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	0.005	93TAU
582.930	171 547.2	20	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	0.005	93TAU
588.167	170 019.7	55	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	0.005	93TAU
589.375	169 671.3	70	$5s^25p^2$	^{3}P	0	–	$5s5p^3$	$^1P^\circ$	1	0.005	93TAU
593.231	168 568.4	40	$5s^25p^2$	^{1}S	0	–	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	0.005	93TAU
595.094	168 040.7	75b	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	0.005	93TAU
599.244	166 876.9	70	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	0.005	93TAU
603.059	165 821.3	20	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	0.005	93TAU
603.404	165 726.4	72	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^1F^\circ$	3	0.005	93TAU
610.576	163 779.8	45	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	0.005	93TAU
618.443	161 696.4	75	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	0.005	93TAU
623.515	160 381.1	15	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^1P^\circ$	1	0.005	93TAU
629.144	158 946.1	12	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	0.005	93TAU
635.383	157 385.4	70	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	0.005	93TAU
637.503	156 862.0	70	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	0.005	93TAU
642.118	155 734.6	55b	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	0.005	93TAU
642.890	155 547.6	5	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^1P^\circ$	1	0.005	93TAU
643.012	155 518.1	65	$5s^25p^2$	^{3}P	0	–	$5s5p^3$	$^3S^\circ$	1	0.005	93TAU
643.133	155 488.8	60	$5s^25p^2$	^{1}S	0	–	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	0.005	93TAU
650.381	153 756.0	65	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	0.005	93TAU
655.333	152 594.2	50	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	0.005	93TAU
662.10	151 035.	6	$5s5p^3$	$^5S^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}P	1	0.01	99GAL
667.725	149 762.3	35	$5s^25p^2$	^{1}S	0	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	0.005	93TAU
679.276	147 215.6	60	$5s^25p^2$	^{3}P	1	–	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	0.005	93TAU
682.573	146 504.5	75	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	0.005	93TAU
683.866	146 227.5	70	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^3S^\circ$	1	0.005	93TAU
691.275	144 660.2	55	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	0.005	93TAU
701.377	142 576.7	50	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	0.005	93TAU
702.340	142 381.2	90b	$5s^25p^2$	^{3}P	2	–	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	0.005	93TAU
702.87	142 274.	12a	$5s5p^3$	$^5S^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	1	0.01	99GAL
707.250	141 392.7	80	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^3S^\circ$	1	0.005	93TAU
707.905	141 261.9	65	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^1P^\circ$	1	0.005	93TAU
732.516	136 515.8	30	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^1D^\circ$	2	0.005	93TAU
735.94	135 880.6	3	$5s5p^3$	$^5S^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	1	0.01	99GAL
743.079	134 575.2	65	$5s^25p^2$	^{3}P	0	–	$5s5p^3$	$^3P^\circ$	1	0.005	93TAU
756.316	132 219.9	10b	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	0.005	93TAU
765.47	130 638.7	2	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^{1}D	2	0.01	99GAL
768.58	130 110.1	3	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	3	0.01	99GAL
772.00	129 533.7	7	$5s5p^3$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}P	2	0.01	99GAL
776.87	128 721.7	6b	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	2	0.01	99GAL
777.600	128 600.8	10	$5s^25p^2$	^{1}S	0	–	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	0.005	93TAU

Spectral lines of Xe V—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
780.662	128 096.4	50	$5s^25p^2$	^{1}D	2	–	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	0.005	93TAU
786.66	127 119.7	3	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}P	1	0.01	99GAL
786.728	127 108.7	10b	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^3S^\circ$	1	0.005	93TAU
791.84	126 288.1	8	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^{3}D	3	0.01	99GAL
797.379	125 410.9	10	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^3P^\circ$	2	0.005	93TAU
798.182	125 284.7	80	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^3P^\circ$	1	0.005	93TAU
798.705	125 202.7	35	$5s^25p^2$	^{1}S	0	–	$5s5p^3$	$^1P^\circ$	1	0.005	93TAU
805.695	124 116.4	75	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^3P^\circ$	0	0.005	93TAU
829.346	120 576.9	82	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^3P^\circ$	2	0.005	93TAU
830.230	120 448.6	35	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^3P^\circ$	1	0.005	93TAU
834.08	119 892.6	1	$5s5p^3$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}D	2	0.01	99GAL
839.15	119 168.2	2	$5s5p^3$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}P	1	0.01	99GAL
844.89	118 358.6	6	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	1	0.01	99GAL
851.814	117 396.5	75	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^1D^\circ$	2	0.005	93TAU
862.20	115 982.4	6	$5s5p^3$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{1}D	2	0.01	99GAL
863.15	115 854.7	3	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}D	2	0.01	99GAL
867.410	115 285.7	80	$5s^25p^2$	^{3}P	0	–	$5s5p^3$	$^3D^\circ$	1	0.005	93TAU
886.68	112 780.3	9a	$5s5p^3$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}D	1	0.01	99GAL
893.12	111 967.0	1	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	1	0.01	99GAL
896.82	111 505.1	10	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	3	0.01	99GAL
900.500	111 049.4	25	$5s^25p^2$	^{1}S	0	–	$5s5p^3$	$^3S^\circ$	1	0.005	93TAU
907.06	110 246.3	9	$5s5p^3$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}P	2	0.01	99GAL
908.11	110 118.8	6	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	2	0.01	99GAL
921.54	108 514.0	7	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}P	1	0.01	99GAL
936.283	106 805.3	85	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^3D^\circ$	2	0.005	93TAU
940.813	106 291.0	40	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^3P^\circ$	2	0.005	93TAU
941.95	106 162.7	5	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^3P^\circ$	1	0.01	99GAL
943.442	105 994.9	20	$5s^25p^2$	^{3}P	1	–	$5s5p^3$	$^3D^\circ$	1	0.005	93TAU
945.244	105 792.8	82	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^3D^\circ$	3	0.005	93TAU
954.66	104 749.3	7	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}D	2	0.01	99GAL
980.68	101 970.1	12	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^3D^\circ$	2	0.01	99GAL
988.534	101 159.9	35	$5s^25p^2$	^{3}P	2	–	$5s5p^3$	$^3D^\circ$	1	0.005	93TAU
989.63	101 047.9	3	$5s5p^3$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^{3}P	1	0.01	99GAL
995.26	100 476.3	5	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	2	0.01	99GAL
1002.48	99 752.6	10	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	1	0.01	99GAL
1026.60	97 408.9	9	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}P	1	0.01	99GAL
1056.47	94 654.8	3	$5s5p^3$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^{3}D	1	0.01	99GAL
1059.34	94 398.4	6	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^{1}G	4	0.01	99GAL
1063.26	94 050.4	4	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}D	2	0.01	99GAL
1063.55	94 024.7	7	$5s5p^3$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^{3}D	1	0.01	99GAL
1071.10	93 362.0	8	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	1	0.01	99GAL
1072.81	93 213.2	6	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^{3}D	1	0.01	99GAL
1083.53	92 290.9	3	$5s5p^3$	$^3S^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}S	1	0.01	99GAL
1086.01	92 080.2	4	$5s5p^3$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^{3}D	2	0.01	99GAL
1092.801	91 508.0	70	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^3D^\circ$	3	0.005	93TAU
1095.65	91 270.0	8	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^{3}D	2	0.01	99GAL
1109.829	90 104.0	15	$5s^25p^2$	^{1}S	0	–	$5s5p^3$	$^3P^\circ$	1	0.005	93TAU
1111.49	89 969.3	5	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{1}S	0	0.01	99GAL
1114.82	89 700.6	3	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	3	0.01	99GAL
1115.28	89 663.6	1	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^{3}D	3	0.01	99GAL
1118.92	89 371.9	6	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}D	2	0.01	99GAL
1119.77	89 304.1	4	$5s5p^3$	$^3S^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{3}P	2	0.01	99GAL
1128.06	88 647.8	3	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	1	0.01	99GAL
1132.32	88 314.3	5	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{3}P	2	0.01	99GAL
1140.28	87 697.8	6	$5s5p^3$	$^3S^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{1}P	1	0.01	99GAL
1140.443	87 685.2	10	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^3D^\circ$	2	0.005	93TAU
1143.53	87 448.5	8	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^{3}D	2	0.01	99GAL
1151.083	86 874.7	30	$5s^25p^2$	^{1}D	2	–	$5s5p^3$	$^3D^\circ$	1	0.005	93TAU
1153.27	86 710.0	6	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^{1}P	1	0.01	99GAL
1155.13	86 570.3	4	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^{1}S	0	0.01	99GAL

Spectral lines of Xe v—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1164.96	85 839.9	11	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
1168.52	85 578.3	9	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
1191.69	83 914.4	10	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
1206.406	82 890.8	70b	$5s^25p^2$	^3P	1	–	$5s5p^3$	$^5S^\circ$	2	0.005	93TAU
1218.88	82 042.5	7	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
1225.10	81 626.0	12	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3G	4	0.01	99GAL
1236.34	80 883.9	4	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1248.58	80 091.0	7	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
1255.32	79 661.0	5	$5s5p^3$	$^3S^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1256.75	79 570.3	6	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1271.10	78 672.0	6	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1281.127	78 056.3	75	$5s^25p^2$	^3P	2	–	$5s5p^3$	$^5S^\circ$	2	0.005	93TAU
1282.89	77 949.0	12	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
1290.57	77 485.1	3	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1301.69	76 823.2	4	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3S	1	0.01	99GAL
1317.46	75 903.6	12	$5s5p^3$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
1324.38	75 507.0	9	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
1324.58	75 495.6	4	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1S	0	0.01	99GAL
1329.44	75 219.6	4	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
1330.70	75 148.4	3	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
1338.05	74 735.6	10	$5s5p^3$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
1340.34	74 607.9	5	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
1341.42	74 547.9	12	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1354.40	73 833.4	7	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
1359.31	73 566.7	13	$5s5p^3$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3F	3	0.01	99GAL
1359.74	73 543.5	4	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
1373.79	72 791.3	11	$5s5p^3$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
1376.20	72 663.9	10	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
1393.73	71 749.9	6	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
1397.45	71 558.9	9a	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
1407.34	71 056.0	9	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
1409.67	70 938.6	7	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
1412.12	70 815.5	10	$5s^25p^2$	^1S	0	–	$5s5p^3$	$^3D^\circ$	1	0.01	99GAL
1413.91	70 725.9	12	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3F	4	0.01	99GAL
1425.61	70 145.4	3	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
1433.80	69 744.7	1	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3F	3	0.01	99GAL
1437.75	69 553.1	1	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1496.38	66 827.9	8	$5s5p^3$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3G	3	0.01	99GAL
1505.80	66 409.9	9	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1531.22	65 307.4	12	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
1533.66	65 203.5	4	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
1543.61	64 783.2	6*	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^3S	1	0.01	99GAL
1543.61	64 783.2	6*	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
1544.11	64 762.2	9	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1557.84	64 191.4	6	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1561.47	64 042.2	14	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
1566.96	63 817.8	7	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
1568.10	63 771.4	5	$5s^25p^2$	^1D	2	–	$5s5p^3$	$^5S^\circ$	2	0.01	99GAL
1574.73	63 502.9	7	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
1575.59	63 468.3	8	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
1596.09	62 653.1	2	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	94GAL
1607.41	62 211.9	7	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
1610.11	62 107.6	3	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1624.41	61 560.8	8	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
1629.08	61 384.3	2	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
1641.33	60 926.2	1	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	0	0.01	94GAL
1648.14	60 674.5	6	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
1655.26	60 413.5	8	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
1668.00	59 952.0	12	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
1675.51	59 683.3	10	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1S	0	0.01	99GAL

Spectral lines of Xe V—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1692.91	59 069.9	7	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
1712.52	58 393.5	10	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
1741.50	57 421.8	3	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
1753.52	57 028.1	6	$5s5p^3$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
1775.44	56 324.1	6	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1782.05	56 115.1	8	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
1818.40	54 993.4	5	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
1844.91	54 203.2	9	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
1845.87	54 175.0	5	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1862.62	53 687.8	6	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1G	4	0.01	99GAL
1870.87	53 451.1	4	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
1893.79	52 804.2	3	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
1920.49	52 070.0	2	$5s^25p(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
1921.44	52 044.3	10	$5s5p^3$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3G	3	0.01	99GAL
1928.68	51 848.9	3	$5s5p^3$	$^3S^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
1944.34	51 431.3	2	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
1959.60	51 030.8	4	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
1976.36	50 598.1	6	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
1987.79	50 307.1	5	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2024.35	49 382.7	2	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
2029.75	49 251.3	8	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
2032.56	49 183.2	6	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
2040.86	48 983.2	5	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
2089.12	47 851.8	1	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3S	1	0.01	99GAL
2123.69	47 073.0	8	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
2124.25	47 060.6	4	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
2138.99	46 736.3	5	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
2145.16	46 601.9	9	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1S	0	0.01	99GAL
2184.69	45 758.8	8	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
2228.33	44 862.7	3	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
2311.04	43 257.26	4	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
2409.59	41 488.22	11	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
2435.82	41 041.49	2	$5s^25p(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
2441.49	40 946.18	14b	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
2441.86	40 939.98	15	$5s5p^3$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3G	3	0.01	99GAL
2443.37	40 914.68	10	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3G	4	0.01	99GAL
2473.11	40 422.70	12	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
2485.41	40 222.67	9	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
2513.88	39 767.17	5	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	0	0.01	99GAL
2522.04	39 638.52	1	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
2538.60	39 379.96	11	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
2664.68	37 516.80	6	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1D	2	0.01	99GAL
2691.74	37 139.67	15w	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	3	0.01	99GAL
2780.10	35 959.32	3	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
2796.17	35 752.66	6	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
2848.43	35 096.74	9	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
2875.15	34 770.59	11*	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
2875.15	34 770.59	11*	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3S	1	0.01	99GAL
2927.64	34 147.21	10	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
2936.86	34 040.02	3	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	0	0.01	99GAL
2937.57	34 031.79	12	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
2954.93	33 831.86	10	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
3015.09	33 156.85	13	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3F	3	0.01	99GAL
3077.71	32 482.25	16	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p(^2P^\circ)4f$	^3G	5	0.01	99GAL
3109.49	32 150.29	9	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1G	4	0.01	99GAL

Spectral lines of Xe V—Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3145.57	31 781.54	10	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	2	0.01	99GAL
3149.11	31 745.81	13	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p(^2P^\circ)4f$	^3G	4	0.01	99GAL
3227.69	30 972.97	5	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
3230.04	30 950.43	6	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
3305.96	30 239.69	16	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3G	3	0.01	99GAL
3309.11	30 210.91	2	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
3312.92	30 176.17	9	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^1P	1	0.01	99GAL
3330.84	30 013.82	16	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3F	4	0.01	99GAL
3443.32	29 033.42	9	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3F	3	0.01	99GAL
3444.70	29 021.79	8	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
3556.98	28 105.71	3	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL
3792.31	26 361.67	11	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
3803.26	26 285.77	12	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	0	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
3827.98	26 116.03	14	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3G	3	0.01	99GAL
3828.89	26 109.82	6	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
3938.04	25 386.16	3	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)6p$	^3P	1	0.01	99GAL
3967.25	25 199.25	6	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
3973.01	25 162.72	8	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3D	1	0.01	99GAL
4038.46	24 754.92	4	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
4237.66	23 591.29	10	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
4305.69	23 218.55	15	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
4422.08	22 607.44	12	$5s^25p(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
4515.67	22 138.90	1	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	2	0.01	99GAL
4558.49	21 930.94	15	$5s5p^3$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
4634.49	21 571.31	12	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	2	0.01	99GAL
4769.94	20 958.76	7	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3P	0	0.01	99GAL
4849.30	20 615.77	9	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
4954.13	20 179.55	15	$5s^25p(^2P^\circ)5d$	$^1F^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1G	4	0.01	99GAL
5007.80	19 963.28	12	$5s^25p(^2P^\circ)5d$	$^1D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3D	3	0.01	99GAL
5151.90	19 404.91	1	$5s^25p(^2P^\circ)4f$	^3F	3	–	$5s^25p(^2P^\circ)6s$	$^3P^\circ$	2	0.01	99GAL
5159.08	19 377.90	15	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^3G	4	0.01	99GAL
5260.19	19 005.43	15	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
5352.92	18 676.20	16	$5s^25p(^2P^\circ)5d$	$^3P^\circ$	2	–	$5s^25p(^2P^\circ)4f$	^3F	3	0.01	99GAL
5394.62	18 531.83	15	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^3F	2	0.01	99GAL
5602.83	17 843.17	9	$5s^25p(^2P^\circ)5d$	$^3D^\circ$	3	–	$5s^25p(^2P^\circ)4f$	^1F	3	0.01	99GAL
5899.11	16 947.01	2	$5s^25p(^2P^\circ)5d$	$^3F^\circ$	4	–	$5s^25p(^2P^\circ)4f$	^3G	3	0.01	99GAL
5955.67	16 786.07	12	$5s^25p(^2P^\circ)5d$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)4f$	^1D	2	0.01	99GAL
6653.85	15 024.74	1	$5s^25p(^2P^\circ)6s$	$^1P^\circ$	1	–	$5s^25p(^2P^\circ)6p$	^3D	1	0.01	99GAL

4.6. Xe VI

In isoelectronic sequence

Ground state

$1s^22s^22p^63s^23p^63d^{10}4s^24p^64d^{10}5s^25p\ ^2P^\circ_{1/2}$

Ionization energy 537 996±57 cm^{-1} (66.703±0.007 eV) [96 WAN]

Partial analyses of the spectrum of five times ionized xenon, Xe VI, were published by several sources [00CHU], [99SAR], [97WAN], [96WAN], [96LAR], [92TAU], and [87KAU]. Some earlier work is summarized in [82HIB]. As indicated in the Xe VI level table, we use the levels determined by Churilov and Joshi [00CHU] for the $5s5p5d$, $5s^25p$, $5s^26p$, $5s^25f$ and $5p^3$ levels. We use Wang *et al.* [97WAN] for the $5s^27s$, $5s^28s$, $5s^27p$, $5s^28p$, $5s^26d$, $5s^27d$, and $5s^28d$ levels. We use Wang *et al.* [96WAN] for the $5s^25g$, $5s^26g$, $5s^26h$, $5s^27h$, $5s^28h$, $5s^27i$, $5s^28i$, and $5s^28k$ levels. We use Larsson *et al.* [96LAR] for the $5s^24f$ levels. We use Tauheed *et al.* [92TAU] for the $5s5p^2\ ^4P$ levels and Kaufman and Sugar [87KAU] for the $5s^26s$, $5s^25d$, and $5s5p^2\ ^2D$, ^2P, and ^2S levels. There is strong disagreement between the analyses of Churilov and Joshi [00CHU] and Sarmiento *et al.* [99SAR]. For this compilation we have chosen to use the results of Churilov and Joshi [00CHU].

In the Xe VI level table we quote the level energies to the indicated number of decimal places for levels with a decimal point. Levels without a decimal point have uncertainties in their tens place. The $5s5p5d$ and $5p^3$ configurations are very mixed in LS notation and we follow Churilov and Joshi [00CHU] in not specifying a LS designation but rather specifying only the configuration, the integer value of the energy level, the J value, and the odd parity.

Xe VI lines have been reported by several sources [80FAW], [87KAU], [92TAU], [96LAR], [96WAN], [97WAN], [00CHU], [01REY]. The sources of the lines in

TABLE 5. Sources of Xe VI lines.

Source	Number of classifications	Light source	Wavelength range (Å)	Uncertainty (Å)
87KAU	14	modified triggered spark initiated by puff of xenon gas	447–915	0.005
92TAU	5	triggered spark	996–1299	0.005
96LAR	7	collision-based spectroscopy	1281–3861	0.5–1.0
96WAN	15	collision-based spectroscopy	779–5237	0.4–0.8
97WAN	18	collision-based spectroscopy	1220–5285	0.6–0.8
00CHU	53	modified triggered spark initiated by puff of xenon gas	521–1181	0.005
01REY	14	capillary pulse discharge	495–1361	0.02

our Xe VI line table are summarized in the Xe VI line source table.

Reyna Almandos *et al.* [01REY] classified 104 Xe VI lines. However, only 20 of these lines are consistent with the energy levels as chosen above. Their study was based on the levels reported Sarmiento *et al.* [99SAR] which, as noted above, disagree with the energy levels of Churilov and Joshi [00CHU] used here.

Where duplicate lines exist, lines from [00CHU], [92TAU], and [87KAU] were given first priority followed by [01REY] and [80FAW] in that order. These were followed by the collision-based spectroscopy results of [97WAN], [96WAN], and [96LAR] in that order. No [80FAW] lines are in the Xe VI line list (see Table 5).

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe VI levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] with adjusted configuration average energies are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references and are not on a common scale. Intensities are not reported for the collision-based spectroscopy results.

The intensity codes given in the Xe VI line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
b	blend
CBS	lines observed in collision based spectroscopy
*	two or more classifications of this line share the same intensity

The ionization energy was determined by [96WAN] by means of spectral analysis.

References

80FAW B. C. Fawcett and G. E. Bromage, J. Phys. B **13**, 2711 (1980).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

82HIB A. Hibbert, J. A. Kernahan, E. H. Pinnington, and F. R. Simpson, Nucl. Instrum. Methods **202**, 329 (1982).

87KAU V. Kaufman and J. Sugar, J. Opt. Soc. Am. B **4**, 1924 (1987).

92TAU A. Tauheed, Y. N. Joshi, and E. H. Pinnington, J. Phys. B **25**, L561 (1992).

96LAR M. O. Larsson, A. M. Gonzalez, R. Hallin, F. Heijkenskjöld, B. Nyström, G. O'Sullivan, C. Weber, and A. Wännström, Phys. Scr. **53**, 317 (1996).

96WAN M. Wang, M. O. Larsson, A. Arnesen, R. Hallin, F. Heijkenskjöld, C. Nordling, and A. Wännström, J. Opt. Soc. Am. B **13**, 2715 (1996); J. Opt. Soc. Am. B **14**, 1515 (1997).

97WAN M. Wang, A. Arnesen, R. Hallin, F. Heijkenskjöld, M. O. Larsson, A. Wännström, A. G. Trigueiros, and A. V. Loginov, J. Opt. Soc. Am. B **14**, 3277 (1997).

99SAR R. Sarmiento, J. G. Reyna Almandos, M. Raineri, and M. Gallardo, J. Phys. B **32**, 2853 (1999).

00CHU S. S. Churilov and Y. N. Joshi, Phys. Scr. **62**, 358 (2000).

01REY J. G. Reyna Almandos, R. Sarmiento, M. Raineri, F. Bredice, and M. Gallardo, J. Quant. Spectrosc. Radiat. Transfer **70**, 189 (2001).

Energy levels of Xe VI

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.0	1	$5s^2 5p$	$^2P^\circ$	1/2	00CHU
15 599.0	1	$5s^2 5p$	$^2P^\circ$	3/2	00CHU
92 586.	0	$5s5p^2$	^4P	1/2	92TAU

Energy levels of Xe VI—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
100 378.	0	$5s5p^2$	^{4}P	3/2	92TAU
107 205.	0	$5s5p^2$	^{4}P	5/2	92TAU
124 869.9	0	$5s5p^2$	^{2}D	3/2	87KAU
129 229.9	0	$5s5p^2$	^{2}D	5/2	87KAU
141 837.2	0	$5s5p^2$	^{2}P	1/2	87KAU
157 995.6	0	$5s5p^2$	^{2}S	1/2	87KAU
159 112.0	0	$5s5p^2$	^{2}P	3/2	87KAU
180 249.6	0	$5s^25d$	^{2}D	3/2	87KAU
182 308.0	0	$5s^25d$	^{2}D	5/2	87KAU
184 994.	1	$5s^24f$	^{2}F°	5/2	96LAR
185 306.	1	$5s^24f$	^{2}F°	7/2	96LAR
223 477.8	0	$5s^26s$	^{2}S	1/2	87KAU
232 585.5	1	$5p^3$	232 586°	3/2	00CHU
240 140.0	1	$5p^3$	240 140°	3/2	00CHU
240 469.2	1	$5p^3$	240 469°	5/2	00CHU
261 136.9	1	$5p^3$	261 137°	1/2	00CHU
266 738.3	1	$5p^3$	266 738°	3/2	00CHU
262 545.9	1	$5s5p5d$	262 546°	5/2	00CHU
267 239.0	1	$5s5p5d$	267 239°	7/2	00CHU
273 614.0	1	$5s5p5d$	273 614°	5/2	00CHU
275 268.1	1	$5s5p5d$	275 268°	3/2	00CHU
275 993.0	1	$5s5p5d$	275 993°	1/2	00CHU
284 366.0	1	$5s5p5d$	284 366°	5/2	00CHU
285 234.3	1	$5s5p5d$	285 234°	7/2	00CHU
285 977.1	1	$5s5p5d$	285 977°	3/2	00CHU
286 338.0	1	$5s5p5d$	286 338°	5/2	00CHU
287 067.9	1	$5s5p5d$	287 068°	1/2	00CHU
292 038.6	1	$5s5p5d$	292 039°	5/2	00CHU
300 240.9	1	$5s5p5d$	300 241°	7/2	00CHU
307 435.4	1	$5s5p5d$	307 435°	3/2	00CHU
314 259.9	1	$5s5p5d$	314 260°	1/2	00CHU
315 238.6	1	$5s5p5d$	315 239°	7/2	00CHU
316 658.4	1	$5s5p5d$	316 658°	5/2	00CHU
323 343.1	1	$5s5p5d$	323 343°	3/2	00CHU
323 914.4	1	$5s5p5d$	323 914°	1/2	00CHU
324 045.0	1	$5s5p5d$	324 045°	5/2	00CHU
326 277.0	1	$5s5p5d$	326 277°	3/2	00CHU
264 891.0	1	$5s^26p$	^{2}P°	1/2	00CHU
270 305.7	1	$5s^26p$	^{2}P°	3/2	00CHU
331 260.0	1	$5s^25f$	^{2}F°	7/2	00CHU
331 798.0	1	$5s^25f$	^{2}F°	5/2	00CHU
338 450	0	$5s^26d$	^{2}D	3/2	97WAN
339 770	0	$5s^26d$	^{2}D	5/2	97WAN
352 250	0	$5s^27s$	^{2}S	1/2	97WAN
374 180	1	$5s^27p$	^{2}P°	1/2	97WAN
375 500	1	$5s^27p$	^{2}P°	3/2	97WAN
376 933	0	$5s^25g$	^{2}G	7/2	96WAN
376 933	0	$5s^25g$	^{2}G	9/2	96WAN
404 100	0	$5s^27d$	^{2}D	3/2	97WAN
404 930	0	$5s^27d$	^{2}D	5/2	97WAN
413 710	0	$5s^28s$	^{2}S	1/2	97WAN
423 270	1	$5s^28p$	^{2}P°	1/2	97WAN
424 230	1	$5s^28p$	^{2}P°	3/2	97WAN

Energy levels of Xe VI—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
426 186	0	$5s^2 6g$	^{2}G	7/2	96WAN
426 186	0	$5s^2 6g$	^{2}G	9/2	96WAN
427 561	1	$5s^2 6h$	^{2}H°	9/2	96WAN
427 561	1	$5s^2 6h$	^{2}H°	11/2	96WAN
442 770	0	$5s^2 8d$	^{2}D	3/2	97WAN
443 150	0	$5s^2 8d$	^{2}D	5/2	97WAN
456 857	1	$5s^2 7h$	^{2}H°	9/2	96WAN
456 857	1	$5s^2 7h$	^{2}H°	11/2	96WAN
457 264	0	$5s^2 7i$	^2I	11/2	96WAN
457 264	0	$5s^2 7i$	^2I	13/2	96WAN
475 837	1	$5s^2 8h$	^{2}H°	9/2	96WAN
475 837	1	$5s^2 8h$	^{2}H°	11/2	96WAN
476 192	0	$5s^2 8i$	^2I	11/2	96WAN
476 192	0	$5s^2 8i$	^2I	13/2	96WAN
476 355	1	$5s^2 8k$	^2K°	13/2	96WAN
476 355	1	$5s^2 8k$	^2K°	15/2	96WAN

Spectral lines of Xe VI

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
447.473	223 477.	15	$5s^2 5p$	^{2}P°	1/2	–	$5s^2 6s$	^{2}S	1/2	0.005	87KAU
481.054	207 877.	40	$5s^2 5p$	^{2}P°	3/2	–	$5s^2 6s$	^{2}S	1/2	0.005	87KAU
494.97	202 032.	5	$5s5p^2$	^{2}D	5/2	–	$5s^2 5f$	^{2}F°	7/2	0.02	01REY
521.408	191 788.4	72	$5s5p^2$	^{2}D	3/2	–	$5s5p5d$	316 658°	5/2	0.005	00CHU
535.651	186 688.7	55	$5s5p^2$	^{4}P	3/2	–	$5s5p5d$	287 068°	1/2	0.005	00CHU
537.612	186 007.8	80	$5s5p^2$	^{2}D	5/2	–	$5s5p5d$	315 239°	7/2	0.005	00CHU
543.510	183 989.3	15	$5s5p^2$	^{4}P	3/2	–	$5s5p5d$	284 366°	5/2	0.005	00CHU
545.236	183 406.8	80	$5s5p^2$	^{4}P	1/2	–	$5s5p5d$	275 993°	1/2	0.005	00CHU
547.399	182 682.1	90	$5s5p^2$	^{4}P	1/2	–	$5s5p5d$	275 268°	3/2	0.005	00CHU
549.219	182 076.7	36	$5s5p^2$	^{2}P	1/2	–	$5s5p5d$	323 914°	1/2	0.005	00CHU
554.785	180 250.0	100	$5s^2 5p$	^{2}P°	1/2	–	$5s^2 5d$	^{2}D	3/2	0.005	87KAU
558.248	179 131.9	20	$5s5p^2$	^{4}P	5/2	–	$5s5p5d$	286 338°	5/2	0.005	00CHU
561.705	178 029.4	78	$5s5p^2$	^{4}P	5/2	–	$5s5p5d$	285 234°	7/2	0.005	00CHU
564.466	177 158.6	27	$5s5p^2$	^{4}P	5/2	–	$5s5p5d$	284 366°	5/2	0.005	00CHU
574.23	174 146.	5	$5s5p^2$	^{4}P	1/2	–	$5p^3$	266 738°	3/2	0.02	01REY
577.252	173 234.6	50	$5s5p^2$	^{4}P	3/2	–	$5s5p5d$	273 614°	5/2	0.005	00CHU
584.761	171 010.0	65	$5s5p^2$	^{2}D	5/2	–	$5s5p5d$	300 241°	7/2	0.005	00CHU
593.34	168 537.	5	$5s5p^2$	^{4}P	1/2	–	$5p^3$	261 137°	1/2	0.02	01REY
594.246	168 280.5	12	$5s5p^2$	^{2}S	1/2	–	$5s5p5d$	326 277°	3/2	0.005	00CHU
597.07	167 485.	5	$5s5p5d$	275 268°	3/2	–	$5s^2 8d$	^{2}D	3/2	0.02	01REY
598.211	167 165.1	35	$5s5p^2$	^{2}P	3/2	–	$5s5p5d$	326 277°	3/2	0.005	00CHU
599.848	166 708.9	150	$5s^2 5p$	^{2}P°	3/2	–	$5s^2 5d$	^{2}D	5/2	0.005	87KAU
603.871	165 598.3	45	$5s5p^2$	^{2}P	1/2	–	$5s5p5d$	307 435°	3/2	0.005	00CHU
604.787	165 347.5	55	$5s5p^2$	^{2}S	1/2	–	$5s5p5d$	323 343°	3/2	0.005	00CHU
606.310	164 932.1	60	$5s5p^2$	^{2}P	3/2	–	$5s5p5d$	324 045°	5/2	0.005	00CHU
607.348	164 650.2	70	$5s^2 5p$	^{2}P°	3/2	–	$5s^2 5d$	^{2}D	3/2	0.005	87KAU
608.898	164 231.1	50	$5s5p^2$	^{2}P	3/2	–	$5s5p5d$	323 343°	3/2	0.005	00CHU
614.222	162 807.6	50	$5s5p^2$	^{2}D	5/2	–	$5s5p5d$	292 039°	5/2	0.005	00CHU
616.650	162 166.5	12	$5s5p^2$	^{4}P	3/2	–	$5s5p5d$	262 546°	5/2	0.005	00CHU
619.310	161 470.0	12	$5s5p^2$	^{2}D	3/2	–	$5s5p5d$	286 338°	5/2	0.005	00CHU
620.705	161 107.1	23	$5s5p^2$	^{2}D	3/2	–	$5s5p5d$	285 977°	3/2	0.005	00CHU

Spectral lines of Xe VI—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
624.875	160 032.0	60	$5s5p^2$	^{4}P	5/2	–	$5s5p5d$	267 239°	7/2	0.005	00CHU
626.970	159 497.3	20	$5s5p^2$	^{2}D	3/2	–	$5s5p5d$	284 366°	5/2	0.005	00CHU
628.489	159 111.8	150	$5s^25p$	^{2}P°	1/2	–	$5s5p^2$	^{2}P	3/2	0.005	87KAU
632.930	157 995.4	25	$5s^25p$	^{2}P°	1/2	–	$5s5p^2$	^{2}S	1/2	0.005	87KAU
636.495	157 110.4	10	$5s5p^2$	^{2}D	5/2	–	$5s5p5d$	286 338°	5/2	0.005	00CHU
637.67	156 821.	3	$5s5p5d$	286 338°	5/2	–	$5s^28d$	^{2}D	5/2	0.02	01REY
639.946	156 263.2	65	$5s5p^2$	^{2}S	1/2	–	$5s5p5d$	314 260°	1/2	0.005	00CHU
643.748	155 340.3	5	$5s5p^2$	^{4}P	5/2	–	$5s5p5d$	262 546°	5/2	0.005	00CHU
657.81	152 020.	3	$5s^26s$	^{2}S	1/2	–	$5s^27p$	^{2}P°	3/2	0.02	01REY
659.849	151 549.8	85	$5s^25d$	^{2}D	3/2	–	$5s^25f$	^{2}F°	5/2	0.005	00CHU
668.948	149 488.5	10	$5s^25d$	^{2}D	5/2	–	$5s^25f$	^{2}F°	5/2	0.005	00CHU
671.357	148 952.0	88	$5s^25d$	^{2}D	5/2	–	$5s^25f$	^{2}F°	7/2	0.005	00CHU
677.720	147 553.6	75	$5s5p^2$	^{4}P	1/2	–	$5p^3$	240 140°	3/2	0.005	00CHU
687.59	145 436.	3	$5s5p^2$	^{2}D	3/2	–	$5s^26p$	^{2}P°	3/2	0.02	01REY
692.591	144 385.4	12	$5s5p^2$	^{2}D	5/2	–	$5s5p5d$	273 614°	5/2	0.005	00CHU
694.590	143 969.8	48	$5s^25d$	^{2}D	5/2	–	$5s5p5d$	326 277°	3/2	0.005	00CHU
696.062	143 665.4	8	$5s^25d$	^{2}D	3/2	–	$5s5p5d$	323 914°	1/2	0.005	00CHU
696.801	143 513.0	250	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{2}P	3/2	0.005	87KAU
702.264	142 396.6	200	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{2}S	1/2	0.005	87KAU
705.035	141 836.9	250	$5s^25p$	^{2}P°	1/2	–	$5s5p^2$	^{2}P	1/2	0.005	87KAU
705.528	141 737.8	15	$5s^25d$	^{2}D	5/2	–	$5s5p5d$	324 045°	5/2	0.005	00CHU
708.842	141 075.2	42	$5s5p^2$	^{2}D	5/2	–	$5s^26p$	^{2}P°	3/2	0.005	00CHU
709.33	140 978.	2	$5s5p5d$	285 234°	7/2	–	$5s^26g$	^{2}G	9/2	0.02	01REY
714.172	140 022.3	32	$5s5p^2$	^{2}D	3/2	–	$5s^26p$	^{2}P°	1/2	0.005	00CHU
714.289	139 999.4	57	$5s5p^2$	^{4}P	1/2	–	$5p^3$	232 586°	3/2	0.005	00CHU
715.507	139 761.0	78	$5s5p^2$	^{4}P	3/2	–	$5p^3$	240 140°	3/2	0.005	00CHU
727.237	137 506.8	20	$5s5p^2$	^{2}D	5/2	–	$5p^3$	266 738°	3/2	0.005	00CHU
733.859	136 266.0	70	$5s5p^2$	^{2}D	3/2	–	$5p^3$	261 137°	1/2	0.005	00CHU
752.247	132 935.1	75 b	$5s5p^2$	^{4}P	5/2	–	$5p^3$	240 140°	3/2	0.005	00CHU
756.391	132 206.8	47	$5s5p^2$	^{4}P	3/2	–	$5p^3$	232 586°	3/2	0.005	00CHU
776.28	128 819.	2	$5s5p5d$	275 268°	3/2	–	$5s^27d$	^{2}D	3/2	0.02	01REY
778.5	128 450	CBS	$5s5p^2$	^{2}P	1/2	–	$5s^26p$	^{2}P°	3/2	0.4	96WAN
792.149	126 238.9	20	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{2}P	1/2	0.005	87KAU
797.571	125 380.7	80	$5s5p^2$	^{4}P	5/2	–	$5p^3$	232 586°	3/2	0.005	00CHU
800.832	124 870.1	250	$5s^25p$	^{2}P°	1/2	–	$5s5p^2$	^{2}D	3/2	0.005	87KAU
880.043	113 630.8	500	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{2}D	5/2	0.005	87KAU
898.963	111 239.3	88	$5s5p^2$	^{2}D	5/2	–	$5p^3$	240 469°	5/2	0.005	00CHU
901.622	110 911.2	12	$5s5p^2$	^{2}D	5/2	–	$5p^3$	240 140°	3/2	0.005	00CHU
915.163	109 270.2	5	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{2}D	3/2	0.005	87KAU
928.366	107 716.1	10	$5s5p^2$	^{2}D	3/2	–	$5p^3$	232 586°	3/2	0.005	00CHU
929.131	107 627.4	8	$5s5p^2$	^{2}P	3/2	–	$5p^3$	266 738°	3/2	0.005	00CHU
967.55	103 354.	8	$5s5p^2$	^{2}D	5/2	–	$5p^3$	232 586°	3/2	0.02	01REY
971.52	102 931.	2	$5s^25d$	^{2}D	5/2	–	$5s5p5d$	285 234°	7/2	0.02	01REY
996.233	100 378.1	5	$5s^25p$	^{2}P°	1/2	–	$5s5p^2$	^{4}P	3/2	0.005	92TAU
1011.1	98 900	CBS*	$5s^25g$	^{2}G	9/2	–	$5s^28h$	^{2}H°	11/2	0.4	96WAN
1011.1	98 900	CBS*	$5s^25g$	^{2}G	7/2	–	$5s^28h$	^{2}H°	9/2	0.4	96WAN
1017.270	98 302.3	10	$5s5p^2$	^{2}P	1/2	–	$5p^3$	240 140°	3/2	0.005	00CHU
1080.080	92 585.7	50	$5s^25p$	^{2}P°	1/2	–	$5s5p^2$	^{4}P	1/2	0.005	92TAU
1091.634	91 605.8	62	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{4}P	5/2	0.005	92TAU
1101.947	90 748.5	8	$5s5p^2$	^{2}P	1/2	–	$5p^3$	232 586°	3/2	0.005	00CHU
1136.412	87 996.3	14	$5s^25d$	^{2}D	5/2	–	$5s^26p$	^{2}P°	3/2	0.005	00CHU
1165.86	85 773.6	4	$5s^26d$	^{2}D	3/2	–	$5s^28p$	^{2}P°	3/2	0.02	01REY
1177.419	84 931.5	25	$5s^25d$	^{2}D	5/2	–	$5s5p5d$	267 239°	7/2	0.005	00CHU
1179.541	84 778.7	30	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{4}P	3/2	0.005	92TAU
1181.465	84 640.7	25	$5s^25d$	^{2}D	3/2	–	$5s^26p$	^{2}P°	1/2	0.005	00CHU
1220.4	81 940	CBS	$5s^26p$	^{2}P°	3/2	–	$5s^27s$	^{2}S	1/2	0.6	97WAN
1251.4	79 910	CBS*	$5s^25g$	^{2}G	9/2	–	$5s^27h$	^{2}H°	11/2	0.6	96WAN
1251.4	79 910	CBS*	$5s^25g$	^{2}G	7/2	–	$5s^27h$	^{2}H°	9/2	0.6	96WAN
1280.5	78 090	CBS	$5s5p^2$	^{4}P	5/2	–	$5s^24f$	^{2}F°	7/2	0.5	96LAR
1285.5	77 790	CBS	$5s5p^2$	^{4}P	5/2	–	$5s^24f$	^{2}F°	5/2	0.5	96LAR
1298.912	76 987.5	25	$5s^25p$	^{2}P°	3/2	–	$5s5p^2$	^{4}P	1/2	0.005	92TAU
1340.69	74 588.5	5	$5s5p^2$	^{2}S	1/2	–	$5p^3$	232 586°	3/2	0.02	01REY

Spectral lines of Xe VI—Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
1359.8	73 540	CBS	$5s^2 6p$	$^2P^\circ$	1/2	–	$5s^2 6d$	^2D	3/2	0.6	97WAN
1361.05	73 472.7	4	$5s5p^2$	^2P	3/2	–	$5p^3$	232 586°	3/2	0.02	01REY
1439.2	69 480	CBS	$5s^2 6p$	$^2P^\circ$	3/2	–	$5s^2 6d$	^2D	5/2	0.6	97WAN
1477.4	67 690	CBS	$5s^2 7p$	$^2P^\circ$	3/2	–	$5s^2 8d$	^2D	5/2	0.6	97WAN
1663.0	60 132.	CBS	$5s5p^2$	^2D	3/2	–	$5s^2 4f$	$^2F^\circ$	5/2	0.5	96LAR
1783.1	56 082.	CBS	$5s5p^2$	^2D	5/2	–	$5s^2 4f$	$^2F^\circ$	7/2	0.5	96LAR
1793.2	55 766.	CBS	$5s5p^2$	^2D	5/2	–	$5s^2 4f$	$^2F^\circ$	5/2	0.5	96LAR
1975.2	50 628.	CBS*	$5s^2 5g$	^2G	7/2	–	$5s^2 6h$	$^2H^\circ$	9/2	0.6	96WAN
1975.2	50 628.	CBS*	$5s^2 5g$	^2G	9/2	–	$5s^2 6h$	$^2H^\circ$	11/2	0.6	96WAN

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2055.6	48 632.	CBS*	$5s^2 6h$	$^2H^\circ$	11/2	–	$5s^2 8i$	^2I	13/2	0.6	96WAN
2055.6	48 632.	CBS*	$5s^2 6h$	$^2H^\circ$	9/2	–	$5s^2 8i$	^2I	11/2	0.6	96WAN
2134.9	46 826.	CBS	$5s^2 6s$	^2S	1/2	–	$5s^2 6p$	$^2P^\circ$	3/2	0.5	96LAR
2414.2	41 409.	CBS	$5s^2 6s$	^2S	1/2	–	$5s^2 6p$	$^2P^\circ$	1/2	0.8	97WAN
2530.6	39 504.	CBS*	$5s^2 7p$	$^2P^\circ$	1/2	–	$5s^2 8s$	^2S	1/2	0.8	97WAN
2530.6	39 504.	CBS*	$5s5p5d$	300 241°	7/2	–	$5s^2 6d$	^2D	5/2	0.8	97WAN
2616.2	38 212.	CBS	$5s^2 7p$	$^2P^\circ$	3/2	–	$5s^2 8s$	^2S	1/2	0.8	97WAN
2798.1	35 728.	CBS*	$5s^2 6d$	^2D	3/2	–	$5s^2 7p$	$^2P^\circ$	1/2	0.8	97WAN
2798.1	35 728.	CBS*	$5s^2 6d$	^2D	5/2	–	$5s^2 7p$	$^2P^\circ$	3/2	0.8	97WAN
3259.5	30 671.	CBS*	$5s^2 6g$	^2G	9/2	–	$5s^2 7h$	$^2H^\circ$	11/2	0.8	96WAN
3259.5	30 671.	CBS*	$5s^2 6g$	^2G	7/2	–	$5s^2 7h$	$^2H^\circ$	9/2	0.8	96WAN
3340.9	29 923.	CBS	$5s^2 7p$	$^2P^\circ$	1/2	–	$5s^2 7d$	^2D	3/2	0.8	97WAN
3365.7	29 703.	CBS*	$5s^2 6h$	$^2H^\circ$	11/2	–	$5s^2 7i$	^2I	13/2	0.8	96WAN
3365.7	29 703.	CBS*	$5s^2 6h$	$^2H^\circ$	9/2	–	$5s^2 7i$	^2I	11/2	0.8	96WAN
3397.3	29 427.	CBS	$5s^2 7p$	$^2P^\circ$	3/2	–	$5s^2 7d$	^2D	5/2	0.8	97WAN
3861.1	25 892.	CBS	$5s5p^2$	^2P	3/2	–	$5s^2 4f$	$^2F^\circ$	5/2	1	96LAR
4299.6	23 251.	CBS	$5s^2 7s$	^2S	1/2	–	$5s^2 7p$	$^2P^\circ$	3/2	0.8	97WAN
4557.3	21 937.	CBS	$5s^2 7s$	^2S	1/2	–	$5s^2 7p$	$^2P^\circ$	1/2	0.8	97WAN
5127.0	19 499.	CBS	$5s^2 8p$	$^2P^\circ$	1/2	–	$5s^2 8d$	^2D	3/2	0.8	97WAN
5179.2	19 303.	b CBS	$5s^2 7d$	^2D	5/2	–	$5s^2 8p$	$^2P^\circ$	3/2	0.8	97WAN
5215.0	19 170.	CBS	$5s^2 7d$	^2D	3/2	–	$5s^2 8p$	$^2P^\circ$	1/2	0.8	97WAN
5236.5	19 091.	CBS*	$5s^2 7i$	^2I	13/2	–	$5s^2 8k$	$^2K^\circ$	15/2	0.8	96WAN
5236.5	19 091.	CBS*	$5s^2 7i$	^2I	11/2	–	$5s^2 8k$	$^2K^\circ$	13/2	0.8	96WAN
5285.2	18 915.	CBS	$5s^2 8p$	$^2P^\circ$	3/2	–	$5s^2 8d$	^2D	5/2	0.8	97WAN

4.7. Xe VII

Cd isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10} 5s^2\ ^1S_0$

Ionization energy 738 800±4000 cm^{-1} (91.6±0.5 eV) [87KAU]

A thorough analysis of the spectrum of six times ionized xenon, Xe VII, was carried out by Churilov and Joshi [02CHU]. 59 of the 72 levels in our Xe VII compilation come from their work since it provides the most complete study of the levels and corrects some of the earlier analyses. Prior to this work, partial analyses of the spectrum of Xe VII were published by several sources [01GAL], [97WAN], [97CAV], [95LAR], [87KAU], [83BLA], [82OSU], [79KNY]. We use seven of the levels determined by Wang *et al.* [97WAN] for the $5s6d$, $5s7p$, and $5s7s$ levels. We use Blackburn *et al.* [83BLA] for the $4d^9 5s^2 6p$ and $4d^9 5s^2 5f$ levels and O'Sullivan [82OSU] for the $4d^9 5s^2 4f\ ^3P_1$ and $^3D_1$ levels. Three $^3P_0^\circ$ levels from Churilov and Joshi [02CHU] were based on one weak transition each and are denoted by "?" in the Xe VII level table. We do not use the energy levels of Gallardo *et al.* [01GAL] since they disagree with Churilov and Joshi [02CHU] for many levels. We quote the results to zero decimal places for levels with a decimal point in the energy level table. Levels without a decimal point have uncertainties in their tens place for values below 600 000 cm^{-1} and in their hundreds place for values above 600 000 cm^{-1}. Hallin *et al.* [82HAL] reported seven tentative yrast lines involving levels ranging from $5g$ to $9l$. Since they are tentative and there are no reported lines connecting these levels to the other levels in our compilation, we have not included them.

Xe VII lines have been reported by several sources [61FAW], [79KNY], [80KER], [82OSU], [83BLA], [87KAU], [91PIN], [95DRU], [95LAR], [97CAV], [97WAN], [01GAL], [02CHU]. The sources of the lines in

TABLE 6. Sources of Xe VII lines.

Source	Number of classifications	Light source	Wavelength range (Å)	Uncertainty (Å)
82OSU	2	laser produced plasma	146–154	0.05
83BLA	4	laser produced plasma	107–120	0.05
95LAR	5	collision-based spectroscopy	773–3645	0.5–1.0
97CAV	5	theta pinch	668–1232	0.02
97WAN	10	collision-based spectroscopy	849–4702	0.4–0.8
01GAL	16	discharge tube	360–1958	0.02
02CHU	89	Xe-gas-puff low inductance vacuum spark and fast capillary discharge	123–1077	0.008

our Xe VII line table are summarized in the Xe VII line source table.

Gallardo *et al.* [01GAL] classified 110 Xe VII lines. However, only 27 of these lines are consistent with the energy levels as chosen above. Their study was based on their levels which disagree with the energy levels used here.

Where duplicate lines exist, the priority order used for selection was [02CHU], [87KAU], [97CAV], [01GAL], [79KNY], [61FAW], [83BLA], [82OSU], [97WAN], [95LAR], [95DRU], [91PIN], and [80KER]. No [95DRU], [91PIN], [87KAU], [80KER], [79KNY], or [61FAW] lines are in our final list (see Table 6).

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe VII levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] with adjusted configuration average energies are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references and are not on a common scale. Intensities are not reported for the collision-based spectroscopy results.

The intensity codes given in the Xe VII line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
a	observed in absorption
CBS	lines observed in collision based spectroscopy
bl	blended with Xe IV or Xe V line
?	tentative classification
*	two or more classifications of this line share the same intensity

The ionization energy was determined by Kaufman and Sugar [87KAU] by means of spectral analysis.

References

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80KER J. A. Kernahan, E. H. Pinnington, J. A. O'Neill, J. L. Bahr, and K. E. Donnelly, J. Opt. Soc. Am. **70**, 1126 (1980).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

82HAL R. Hallin, J. A. Leavitt, A. Lindgård, P. W. Rathmann, H. Vach, and E. Veje, Nucl. Instrum. Methods **202**, 41 (1982).

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91PIN E. H. Pinnington, J. A. Kernahan, W. Ansbacher, and A. Tauheed, J. Opt. Soc. Am. B **8**, 2233 (1991).

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01GAL M. Gallardo, F. Bredice, M. Raineri, A. G. Trigueiros, and J. G. Reyna Almandos, Eur. Phys. J. D **15**, 307 (2001).

02CHU S. S. Churilov and Y. N. Joshi, Phys. Scr. **65**, 35 (2002).

Energy levels of Xe VII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$5s^2$	^1S	0	02CHU
96 141.	1	$5s5p$	$^3P^\circ$	0	02CHU
100 451.	1	$5s5p$	$^3P^\circ$	1	02CHU
113 676.	1	$5s5p$	$^3P^\circ$	2	02CHU
143 259.	1	$5s5p$	$^1P^\circ$	1	02CHU
223 673.	0	$5p^2$	^3P	0	02CHU
234 685.	0	$5p^2$	^3P	1	02CHU
236 100.	0	$5p^2$	^1D	2	02CHU
251 853.	0	$5p^2$	^3P	2	02CHU
273 208.	0	$5p^2$	^1S	0	02CHU
272 581.	1	$4f5s$	$^3F^\circ$	2	02CHU
272 812.	1	$4f5s$	$^3F^\circ$	3	02CHU
273 245.	1	$4f5s$	$^3F^\circ$	4	02CHU
279 282.	1	$4f5s$	$^1F^\circ$	3	02CHU
287 772.	0	$5s5d$	^3D	1	02CHU
288 712.	0	$5s5d$	^3D	2	02CHU
290 340.	0	$5s5d$	^3D	3	02CHU
307 542.	0	$5s5d$	^1D	2	02CHU
354 833.	0	$5s6s$	^3S	1	02CHU
361 671.	0	$5s6s$	^1S	0	02CHU
382 356.	0	$4f5p$	^3G	3	02CHU
385 422.	0	$4f5p$	^3F	3	02CHU
386 172.	0	$4f5p$	^3G	4	02CHU
386 811.	0	$4f5p$	^3F	2	02CHU
398 027.	0	$4f5p$	^1F	3	02CHU
399 987.	0	$4f5p$	^3F	4	02CHU
401 595.	0	$4f5p$	^3G	5	02CHU
404 979.	0	$4f5p$	^3D	3	02CHU
406 342.	0	$4f5p$	^3D	2	02CHU
408 767.	0	$4f5p$	^3D	1	02CHU
411 551.	0	$4f5p$	^1G	4	02CHU
416 357.	0	$4f5p$	^1D	2	02CHU
393 792.	1	$5p5d$	$^3F^\circ$	2	02CHU
401 413.	1	$5p5d$	$^3F^\circ$	3	02CHU
404 548.	1	$5p5d$	$^1D^\circ$	2	02CHU
411 022.	1	$5p5d$	$^3D^\circ$	1	02CHU
412 567.	1	$5p5d$	$^3F^\circ$	4	02CHU
417 240.	1	$5p5d$	$^3D^\circ$	2	02CHU
423 028.	1	$5p5d$	$^3D^\circ$	3	02CHU
424 188.?	1	$5p5d$	$^3P^\circ$	0	02CHU
424 567.	1	$5p5d$	$^3P^\circ$	1	02CHU
425 234.	1	$5p5d$	$^3P^\circ$	2	02CHU
438 428.	1	$5p5d$	$^1F^\circ$	3	02CHU
441 376.	1	$5p5d$	$^1P^\circ$	1	02CHU
400 666.?	1	$5s6p$	$^3P^\circ$	0	02CHU
400 893.	1	$5s6p$	$^3P^\circ$	1	02CHU
407 802.	1	$5s6p$	$^1P^\circ$	1	02CHU
408 347.	1	$5s6p$	$^3P^\circ$	2	02CHU
462 702.	1	$5s5f$	$^3F^\circ$	2	02CHU
462 791.	1	$5s5f$	$^3F^\circ$	3	02CHU
463 159.	1	$5s5f$	$^3F^\circ$	4	02CHU
467 700.	1	$5s5f$	$^1F^\circ$	3	02CHU
468 777.?	1	$5p6s$	$^3P^\circ$	0	02CHU
470 805.	1	$5p6s$	$^3P^\circ$	1	02CHU
485 435.	1	$5p6s$	$^3P^\circ$	2	02CHU
489 957.	1	$5p6s$	$^1P^\circ$	1	02CHU

Energy levels of Xe VII—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
475 990	0	$5s6d$	^{3}D	1	97WAN
476 220	0	$5s6d$	^{3}D	2	97WAN
476 800	0	$5s6d$	^{3}D	3	97WAN
506 230	0	$5s7s$	^{3}S	1	97WAN
527 070	1	$5s7p$	^{3}P°	0	97WAN
527 500	1	$5s7p$	^{3}P°	1	97WAN
529 340	1	$5s7p$	^{3}P°	2	97WAN
539 264.	1	$4d^9 5s^2 5p$	^{1}P°	1	02CHU
549 828.	1	$4d^9 5s^2 5p$	^{3}D°	1	02CHU
650 080	1	$4d^9 5s^2 4f$	^{3}P°	1	82OSU
683 150	1	$4d^9 5s^2 4f$	^{3}D°	1	82OSU
811 412.	1	$4d^9 5s^2 4f$	^{1}P°	1	02CHU
835 110	1	$4d^9 5s^2 6p$	^{3}P°	1	83BLA
845 750	1	$4d^9 5s^2 6p$	^{1}P°	1	83BLA
881 730	1	$4d^9 5s^2 5f$	^{3}P°	1	83BLA
935 680	1	$4d^9 5s^2 5f$	^{1}P°	1	83BLA

Spectral lines of Xe VII

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
106.89	935.5	80a	$5s^2$	^{1}S	0	–	$4d^9 5s^2 5f$	^{1}P°	1	0.05	83BLA
113.43	881.6	50a	$5s^2$	^{1}S	0	~	$4d^9 5s^2 5f$	^{3}P°	1	0.05	83BLA
118.25	845.7	30a	$5s^2$	^{1}S	0	–	$4d^9 5s^2 6p$	^{1}P°	1	0.05	83BLA
119.75	835.1	10a	$5s^2$	^{1}S	0	–	$4d^9 5s^2 6p$	^{3}P°	1	0.05	83BLA
123.242	811.41	30	$5s^2$	^{1}S	0	–	$4d^9 5s^2 4f$	^{1}P°	1	0.008	02CHU
146.38	683.2		$5s^2$	^{1}S	0	–	$4d^9 5s^2 4f$	^{3}D°	1	0.05	82OSU
153.83	650.1		$5s^2$	^{1}S	0	–	$4d^9 5s^2 4f$	^{3}P°	1	0.05	82OSU
181.876	549.83	20	$5s^2$	^{1}S	0	–	$4d^9 5s^2 5p$	^{3}D°	1	0.008	02CHU
185.438	539.26	50	$5s^2$	^{1}S	0	–	$4d^9 5s^2 5p$	^{1}P°	1	0.008	02CHU
245.215	407.805	75	$5s^2$	^{1}S	0	–	$5s6p$	^{1}P°	1	0.008	02CHU
249.445	400.890	25	$5s^2$	^{1}S	0	–	$5s6p$	^{3}P°	1	0.008	02CHU
360.35	277.508	1	$5p^2$	^{3}P	2	–	$5s7p$	^{3}P°	2	0.02	01GAL
366.168	273.099	55	$5s5p$	^{1}P°	1	–	$4f5p$	^{1}D	2	0.008	02CHU
386.560	258.692	35	$5s5p$	^{3}P°	0	–	$5s6s$	^{3}S	1	0.008	02CHU
393.114	254.379	64	$5s5p$	^{3}P°	1	–	$5s6s$	^{3}S	1	0.008	02CHU
393.919	253.859	54	$5p^2$	^{1}D	2	–	$5p6s$	^{1}P°	1	0.008	02CHU
404.635	247.136	33	$5p^2$	^{3}P	0	–	$5p6s$	^{3}P°	1	0.008	02CHU
410.585	243.555	25?	$5s5p$	^{1}P°	1	–	$4f5p$	^{3}F	2	0.008	02CHU
413.95	241.575	1	$5s5d$	^{3}D	1	–	$5s7p$	^{3}P°	2	0.02	01GAL
414.666	241.158	81	$5s5p$	^{3}P°	2	–	$5s6s$	^{3}S	1	0.008	02CHU
419.989	238.101	81	$5p^2$	^{3}P	2	–	$5p6s$	^{1}P°	1	0.008	02CHU
426.072	234.702	58	$5p^2$	^{1}D	2	–	$5p6s$	^{3}P°	1	0.008	02CHU
427.183	234.092	28?	$5p^2$	^{3}P	1	–	$5p6s$	^{3}P°	0	0.008	02CHU
450.85	221.803	1	$5s5d$	^{1}D	2	–	$5s7p$	^{3}P°	2	0.02	01GAL
457.851	218.412	56	$5s5p$	^{1}P°	1	–	$5s6s$	^{1}S	0	0.008	02CHU
482.877	207.092	27	$5s5p$	^{3}P°	1	–	$5s5d$	^{1}D	2	0.008	02CHU
494.243	202.330	34	$5p^2$	^{1}D	2	–	$5p5d$	^{1}F°	3	0.008	02CHU
521.832	191.633	75	$5s5p$	^{3}P°	0	–	$5s5d$	^{3}D	1	0.008	02CHU
526.644	189.882	48	$5p^2$	^{3}P	1	–	$5p5d$	^{3}P°	1	0.008	02CHU
527.697	189.503	18?	$5p^2$	^{3}P	1	–	$5p5d$	^{3}P°	0	0.008	02CHU
528.720	189.136	10	$5p^2$	^{1}D	2	–	$5p5d$	^{3}P°	2	0.008	02CHU
531.179	188.260	83	$5s5p$	^{3}P°	1	–	$5s5d$	^{3}D	2	0.008	02CHU
533.763	187.349	58	$5p^2$	^{3}P	0	–	$5p5d$	^{3}D°	1	0.008	02CHU
533.850	187.319	77	$5s5p$	^{3}P°	1	–	$5s5d$	^{3}D	1	0.008	02CHU

Spectral lines of Xe VII—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
534.966	186.928	45	$5p^2$	^{1}D	2	–	$5p5d$	^{3}D°	3	0.008	02CHU
535.980	186.574	35	$5p^2$	^{3}P	2	–	$5p5d$	^{1}F°	3	0.008	02CHU
543.102	184.127	20	$5p^2$	^{3}P	0	–	$5s6p$	^{1}P°	1	0.008	02CHU
547.780	182.555	54	$5p^2$	^{3}P	1	–	$5p5d$	^{3}D°	2	0.008	02CHU
566.050	176.663	85	$5s5p$	^{3}P°	2	–	$5s5d$	^{3}D	3	0.008	02CHU
571.309	175.037	66	$5s5p$	^{3}P°	2	–	$5s5d$	^{3}D	2	0.008	02CHU
571.656	174.930	43	$5s5d$	^{3}D	1	–	$5s5f$	^{3}F°	2	0.008	02CHU
574.451	174.079	71	$5s5d$	^{3}D	2	–	$5s5f$	^{3}F°	3	0.008	02CHU
576.768	173.380	27	$5p^2$	^{3}P	2	–	$5p5d$	^{3}P°	2	0.008	02CHU
577.63	173.121	8	$5p^2$	^{3}P	1	–	$5s6p$	^{1}P°	1	0.02	01GAL
578.640	172.819	62	$5s5d$	^{3}D	3	–	$5s5f$	^{3}F°	4	0.008	02CHU
578.850	172.756	10	$5s5p$	^{3}P°	1	–	$5p^2$	^{1}S	0	0.008	02CHU
579.15	172.667	3	$5s6s$	^{3}S	1	–	$5s7p$	^{3}P°	1	0.02	01GAL
580.549	172.251	20	$5p^2$	^{1}D	2	–	$5s6p$	^{3}P°	2	0.008	02CHU
584.196	171.175	26	$5p^2$	^{3}P	2	–	$5p5d$	^{3}D°	3	0.008	02CHU
588.717	169.861	52	$5p^2$	^{3}P	1	–	$5p5d$	^{1}D°	2	0.008	02CHU
594.643	168.168	65	$5p^2$	^{1}S	0	–	$5p5d$	^{1}P°	1	0.008	02CHU
601.71	166.193	2	$5p^2$	^{3}P	1	–	$5s6p$	^{3}P°	1	0.02	01GAL
604.913	165.313	62	$5p^2$	^{1}D	2	–	$5p5d$	^{3}F°	3	0.008	02CHU
608.706	164.283	94	$5s5p$	^{1}P°	1	–	$5s5d$	^{1}D	2	0.008	02CHU
624.383	160.158	71	$5s5d$	^{1}D	2	–	$5s5f$	^{1}F°	3	0.008	02CHU
634.144	157.6929	28	$5p^2$	^{1}D	2	–	$5p5d$	^{3}F°	2	0.008	02CHU
660.502	151.4000	88	$5s5p$	^{3}P°	1	–	$5p^2$	^{3}P	2	0.008	02CHU
667.92	149.719	20	$5s5d$	^{3}D	2	–	$5p5d$	^{1}F°	3	0.02	97CAV
671.02	149.027	1	$5p^2$	^{3}P	2	–	$5s6p$	^{3}P°	1	0.02	01GAL
675.28	148.087	4	$5s5d$	^{3}D	3	–	$5p5d$	^{1}F°	3	0.02	01GAL
687.53	145.448	5	$5s5p$	^{1}P°	1	–	$5s5d$	^{3}D	2	0.02	01GAL
691.98	144.513	5	$5s5p$	^{1}P°	1	–	$5s5d$	^{3}D	1	0.02	01GAL
698.038	143.2587	96	$5s^2$	^{1}S	0	–	$5s5p$	^{1}P°	1	0.008	02CHU
721.800	138.5425	86	$5s5p$	^{3}P°	0	–	$5p^2$	^{3}P	1	0.008	02CHU
723.701	138.1786	87	$5s5p$	^{3}P°	2	–	$5p^2$	^{3}P	2	0.008	02CHU
729.531	137.0744	62	$4f5s$	^{1}F°	3	–	$4f5p$	^{1}D	2	0.008	02CHU
731.028	136.7937	66bl	$5s5d$	^{3}D	1	–	$5p5d$	^{3}P°	1	0.008	02CHU
732.518	136.5154	72bl	$5s5d$	^{3}D	2	–	$5p5d$	^{3}P°	2	0.008	02CHU
734.291	136.1858	32	$4f5s$	^{3}F°	2	–	$4f5p$	^{3}D	1	0.008	02CHU
737.206	135.6473	85	$5s5p$	^{3}P°	1	–	$5p^2$	^{1}D	2	0.008	02CHU
744.961	134.2352	87	$5s5p$	^{3}P°	1	–	$5p^2$	^{3}P	1	0.008	02CHU
747.607	133.7601	40	$4f5s$	^{3}F°	2	–	$4f5p$	^{3}D	2	0.008	02CHU
748.890	133.5310	54	$4f5s$	^{3}F°	3	–	$4f5p$	^{3}D	2	0.008	02CHU
753.652	132.6872	46	$5s5d$	^{3}D	3	–	$5p5d$	^{3}D°	3	0.008	02CHU
756.035	132.2690	70	$4f5s$	^{1}F°	3	–	$4f5p$	^{1}G	4	0.008	02CHU
756.620	132.1667	30	$4f5s$	^{3}F°	3	–	$4f5p$	^{3}D	3	0.008	02CHU
759.107	131.7337	75	$4f5s$	^{3}F°	4	–	$4f5p$	^{3}D	3	0.008	02CHU
764.05	130.881	20	$5s5d$	^{1}D	2	–	$5p5d$	^{1}F°	3	0.02	97CAV
765.684	130.6022	78	$5s6s$	^{3}S	1	–	$5p6s$	^{3}P°	2	0.008	02CHU
769.534	129.9488	52	$5s5p$	^{1}P°	1	–	$5p^2$	^{1}S	0	0.008	02CHU
772.9	129.38	CBS	$5s5d$	^{3}D	1	–	$5p5d$	^{3}D°	2	0.5	95LAR
779.119	128.3501	79	$4f5s$	^{3}F°	4	–	$4f5p$	^{3}G	5	0.008	02CHU
786.329	127.1732	64	$4f5s$	^{3}F°	3	–	$4f5p$	^{3}F	4	0.008	02CHU
788.991	126.7442	53	$4f5s$	^{3}F°	4	–	$4f5p$	^{3}F	4	0.008	02CHU
797.156	125.4460	56	$4f5s$	^{3}F°	2	–	$4f5p$	^{1}F	3	0.008	02CHU
811.544	123.2219	87	$5s5p$	^{3}P°	1	–	$5p^2$	^{3}P	0	0.008	02CHU
816.825	122.4252	85	$5s5p$	^{3}P°	2	–	$5p^2$	^{1}D	2	0.008	02CHU
818.149	122.2271	78	$5s5d$	^{3}D	3	–	$5p5d$	^{3}F°	4	0.008	02CHU
826.386	121.0088	85	$5s5p$	^{3}P°	2	–	$5p^2$	^{3}P	1	0.008	02CHU
839.75	119.083	4	$5s5d$	^{3}D	2	–	$5s6p$	^{1}P°	1	0.02	01GAL
842.136	118.7457	37	$4f5s$	^{1}F°	3	–	$4f5p$	^{1}F	3	0.008	02CHU
847.421	118.0051	47	$5s5d$	^{3}D	3	–	$5s6p$	^{3}P°	2	0.008	02CHU
849.4	117.73	CBS	$5s5d$	^{1}D	2	–	$5p5d$	^{3}P°	2	0.4	97WAN
863.285	115.8366	23	$5s5d$	^{3}D	2	–	$5p5d$	^{1}D°	2	0.008	02CHU
875.422	114.2306	32	$4f5s$	^{3}F°	2	–	$4f5p$	^{3}F	2	0.008	02CHU
882.137	113.3611	18	$4f5s$	^{3}F°	3	–	$4f5p$	^{3}G	4	0.008	02CHU

Spectral lines of Xe VII—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
884.002	113.1219	37	$5s5d$	^{3}D	1	–	$5s6p$	^{3}P°	1	0.008	02CHU
885.528	112.9270	50	$4f5s$	^{3}F°	4	–	$4f5p$	^{3}G	4	0.008	02CHU
885.787	112.8940	33?	$5s5d$	^{3}D	1	–	$5s6p$	^{3}P°	0	0.008	02CHU
887.300	112.7015	72	$5s5d$	^{3}D	2	–	$5p5d$	^{3}F°	3	0.008	02CHU
888.024	112.6096	30	$4f5s$	^{3}F°	3	–	$4f5p$	^{3}F	3	0.008	02CHU
891.443	112.1777	48*	$5s5d$	^{3}D	2	–	$5s6p$	^{3}P°	1	0.008	02CHU
891.443	112.1777	48*	$4f5s$	^{3}F°	4	–	$4f5p$	^{3}F	3	0.008	02CHU
910.956	109.7748	48	$4f5s$	^{3}F°	2	–	$4f5p$	^{3}G	3	0.008	02CHU
920.870	108.5930	84	$5s5p$	^{1}P°	1	–	$5p^2$	^{3}P	2	0.008	02CHU
943.220	106.0198	39	$5s5d$	^{3}D	1	–	$5p5d$	^{3}F°	2	0.008	02CHU
949.3	105.34	CBS	$5s6p$	^{3}P°	1	–	$5s7s$	^{3}S	1	0.4	97WAN
970.170	103.0747	30	$4f5s$	^{1}F°	3	–	$4f5p$	^{3}G	3	0.008	02CHU
995.511	100.4509	88	$5s^2$	^{1}S	0	–	$5s5p$	^{3}P°	1	0.008	02CHU
997.406	100.2601	67	$5s5d$	^{1}D	2	–	$5s6p$	^{1}P°	1	0.008	02CHU
999.64	100.036	10	$4f5p$	^{3}F	3	–	$5p6s$	^{3}P°	2	0.02	97CAV
1016.19	98.4068	10	$5s6p$	^{1}P°	1	–	$5s7s$	^{3}S	1	0.02	97CAV
1077.120	92.8402	84	$5s5p$	^{1}P°	1	–	$5p^2$	^{1}D	2	0.008	02CHU
1094.4	91.37	CBS	$5s5p$	^{1}P°	1	–	$5p^2$	^{3}P	1	0.4	97WAN
1231.57	81.1972	20	$4f5p$	^{3}D	1	–	$5p6s$	^{1}P°	1	0.02	97CAV
1243.58	80.4130	7	$5s5p$	^{1}P°	1	–	$5p^2$	^{3}P	0	0.02	01GAL
1324.8	75.48	CBS	$5p5d$	^{3}F°	3	–	$5s6d$	^{3}D	3	0.6	97WAN
1327.1	75.35	CBS*	$5s6p$	^{3}P°	1	–	$5s6d$	^{3}D	2	0.6	97WAN
1327.1	75.35	CBS*	$5s6p$	^{3}P°	0	–	$5s6d$	^{3}D	1	0.6	97WAN
1331.63	75.0959	6	$5s6p$	^{3}P°	1	–	$5s6d$	^{3}D	1	0.02	01GAL
1460.95	68.4486	2	$5s6p$	^{3}P°	2	–	$5s6d$	^{3}D	3	0.02	01GAL
1473.25	67.8771	4	$5s6p$	^{3}P°	2	–	$5s6d$	^{3}D	2	0.02	01GAL
1902.3	52.568	CBS	$5s6d$	^{3}D	3	–	$5s7p$	^{3}P°	2	0.6	97WAN
1949.6	51.293	CBS	$5s6d$	^{3}D	2	–	$5s7p$	^{3}P°	1	0.6	97WAN
1957.79	51.0780	7	$5s6d$	^{3}D	1	–	$5s7p$	^{3}P°	0	0.02	01GAL

Observed air wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2170.5	46.058	CBS	$5s6s$	^{3}S	1	–	$5s6p$	^{3}P°	1	0.5	95LAR
2314.9	43.185	CBS	$5p^2$	^{1}D	2	–	$4f5s$	^{1}F°	3	0.5	95LAR
3537.5	28.260	CBS	$4f5s$	^{1}F°	3	–	$5s5d$	^{1}D	2	1	95LAR
3645.2	27.426	CBS	$5p^2$	^{3}P	2	–	$4f5s$	^{1}F°	3	0.5	95LAR
4327.8	23.100	CBS	$5s7s$	^{3}S	1	–	$5s7p$	^{3}P°	2	0.8	97WAN
4702.0	21.262	CBS	$5s7s$	^{3}S	1	–	$5s7p$	^{3}P°	1	0.8	97WAN

4.8. Xe VIII

Ag isoelectronic sequence

Ground state $1s^22s^22p^63s^23p^63d^{10}4s^24p^64d^{10}5s\ ^2S_{1/2}$

Ionization energy 854 755±33 cm^{-1} (105.976±0.004 eV) [96WAN]

Partial analyses of the spectrum of seven times ionized xenon, Xe VIII, were published by several sources [02CHU], [96WAN], [95LAR], [95DRU], [84KAU], [83BLA], [82OSU], [81KAU], [79ROB]. We use the levels determined by Wang *et al.* [96WAN] for the $8-9s$, $8-9p$, $7-9d$, $5f\ ^2F_{7/2}$, $6-9f$, $5-9g$, $6-9h$, $7-10i$, $8-10k$, and $9l$ levels. We use Churilov and Yoshi [02CHU] for the $4d^95s4f$ levels. We use Larsson *et al.* [95LAR] for the $7p$, $6d$, and $4f$ levels. We use Kaufman and Sugar [84KAU] for the $4d^95s5p$ levels. We use Kaufman and Sugar [81KAU] for the $5-7s$, $5-6p$, $5d$, and $5f\ ^2F_{5/2}$ levels. On the basis of the rejection by Kaufman and Sugar [84KAU] of Blackburn *et al.* [83BLA] results for the $4d^95s5p$ levels we have not included any of the Blackburn *et al.* [83BLA] levels or the related work of O'Sullivan [82OSU] in this compilation. Note that Kaufman and Sugar [84KAU] labeled their levels with the leading term. As a result, two different levels are designated $4d^95s5p\ (3/2,^3P_0)^\circ_{3/2}$ (at 550 449 and 556 619 cm^{-1}). For consistency we maintain their designations. This only affects the lines 181.670 Å (with 550 449 cm^{-1} as its upper level) and 179.656 Å (with 556 619 cm^{-1} as its upper level). We quote the results presented in the Xe VIII level table to the indicated number of decimal places (zero) for levels with a decimal point. Levels without a decimal point have uncertainties in their tens place.

Xe VIII lines have been reported by several sources

[61FAW], [79ROB], [80KER], [81BAS], [81KAU], [82OSU], [83BLA], [84KAU], [95DRU], [95LAR], [96WAN], [02CHU]. The sources of the lines in our Xe VIII line table are summarized in the Xe VIII line source table (see Table 7).

Churilov and Yoshi [02CHU] classified two Xe VIII resonance lines. They remeasured the spectrograms of Kaufman *et al.* [83KAU] using improved measurement techniques. Blackburn *et al.* [83BLA] classified 18 VUV lines. They used a laser-produced plasma as their source. The quoted uncertainty of their wavelength measurements was 0.05 Å. However, due to the findings of Kaufman and Sugar [84KAU], none of their lines is used here. O'Sullivan [82OSU] classified two VUV lines using the experimental procedure of Blackburn *et al.* [83BLA]. These lines are also not used here.

Where duplicate lines exist, the priority order used for selection was [02CHU], [84KAU], [81KAU], [79ROB], [61FAW], [95LAR], [96WAN], [95DRU], [81BAS], and [80KER]. No [80KER] or [61FAW] lines are in our final list.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe VIII levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] with adjusted configuration average energies are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references and are not on a common scale. Intensities are not reported for the collision-based spectroscopy, charge-exchange spectroscopy, or beam foil results.

The intensity codes given in the Xe VIII line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
b	blend
BF	lines observed in beam foil spectroscopy
CBS	lines observed in collision based spectroscopy
CES	lines observed in charge exchange spectroscopy
*	two or more classifications of this line share the same intensity

The ionization energy was determined by [96WAN] by means of spectral analysis.

References

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81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

81KAU V. Kaufman and J. Sugar, Phys. Scr. **24**, 738 (1981).

82OSU G. O'Sullivan, J. Phys. B **15**, L765 (1982).

83BLA J. Blackburn, P. K. Carroll, J. Costello, and G. O'Sullivan, J. Opt. Soc. Am. **73**, 1325 (1983).

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84KAU V. Kaufman and J. Sugar, J. Opt. Soc. Am. B **1**, 38 (1984).

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Energy levels of Xe VIII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$5s$	^2S	1/2	81KAU
116 467.	1	$5p$	$^2P^\circ$	1/2	81KAU
135 052.	1	$5p$	$^2P^\circ$	3/2	81KAU
265 161	1	$4f$	$^2F^\circ$	5/2	95LAR
265 711	1	$4f$	$^2F^\circ$	7/2	95LAR
309 888.	0	$5d$	^2D	3/2	81KAU
312 816.	0	$5d$	^2D	5/2	81KAU
395 497.	0	$6s$	^2S	1/2	81KAU
443 378.	1	$6p$	$^2P^\circ$	1/2	81KAU
450 773.	1	$6p$	$^2P^\circ$	3/2	81KAU
497 579.	1	$5f$	$^2F^\circ$	5/2	81KAU

Energy levels of Xe VIII—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
498 018.	1	$5f$	$^2F^\circ$	7/2	96WAN
527 425	0	$6d$	^2D	3/2	95LAR
528 794	0	$6d$	^2D	5/2	95LAR
541 550.	1	$4d^9(^2D_{5/2})5s5p(^3P_1^\circ)$	$(5/2,^3P_1^\circ)$	3/2	84KAU
550 449.	1	$4d^9(^2D_{3/2})5s5p(^3P_0^\circ)$	$(3/2,^3P_0^\circ)$	3/2	84KAU
555 118.	1	$4d^9(^2D_{5/2})5s5p(^3P_2^\circ)$	$(5/2,^3P_2^\circ)$	1/2	84KAU
556 619.	1	$4d^9(^2D_{3/2})5s5p(^3P_0^\circ)$	$(3/2,^3P_0^\circ)$	3/2	84KAU
562 724.	1	$4d^9(^2D_{3/2})5s5p(^3P_1^\circ)$	$(3/2,^3P_1^\circ)$	3/2	84KAU
564 149.	1	$4d^9(^2D_{3/2})5s5p(^3P_1^\circ)$	$(3/2,^3P_1^\circ)$	1/2	84KAU
568 595.	1	$4d^9(^2D_{3/2})5s5p(^3P_2^\circ)$	$(3/2,^3P_2^\circ)$	1/2	84KAU
574 228.	1	$4d^9(^2D_{3/2})5s5p(^3P_2^\circ)$	$(3/2,^3P_2^\circ)$	3/2	84KAU
585 288.	1	$4d^9(^2D_{5/2})5s5p(^1P_1^\circ)$	$(5/2,^1P_1^\circ)$	3/2	84KAU
599 973.	1	$4d^9(^2D_{3/2})5s5p(^1P_1^\circ)$	$(3/2,^1P_1^\circ)$	1/2	84KAU
565 296.	0	$7s$	^2S	1/2	81KAU
570 268	0	$5g$	^2G	7/2	96WAN
570 268	0	$5g$	^2G	9/2	96WAN
589 827	1	$7p$	$^2P^\circ$	1/2	95LAR
593 781	1	$7p$	$^2P^\circ$	3/2	95LAR
616 368	1	$6f$	$^2F^\circ$	5/2	96WAN
616 708	1	$6f$	$^2F^\circ$	7/2	96WAN
634 595	0	$7d$	^2D	3/2	96WAN
635 355	0	$7d$	^2D	5/2	96WAN
655 008	0	$8s$	^2S	1/2	96WAN
656 891	0	$6g$	^2G	7/2	96WAN
656 891	0	$6g$	^2G	9/2	96WAN
659 228	1	$6h$	$^2H^\circ$	9/2	96WAN
659 228	1	$6h$	$^2H^\circ$	11/2	96WAN
669 948	1	$8p$	$^2P^\circ$	1/2	96WAN
672 187	1	$8p$	$^2P^\circ$	3/2	96WAN
684 635	1	$7f$	$^2F^\circ$	5/2	96WAN
684 818	1	$7f$	$^2F^\circ$	7/2	96WAN
696 304	0	$8d$	^2D	3/2	96WAN
696 678	0	$8d$	^2D	5/2	96WAN
708 690	0	$9s$	^2S	1/2	96WAN
709 360	0	$7g$	^2G	7/2	96WAN
709 360	0	$7g$	^2G	9/2	96WAN
711 135	1	$7h$	$^2H^\circ$	9/2	96WAN
711 135	1	$7h$	$^2H^\circ$	11/2	96WAN
711 338	0	$7i$	^2I	11/2	96WAN
711 338	0	$7i$	^2I	13/2	96WAN
717 839	1	$9p$	$^2P^\circ$	1/2	96WAN
719 277	1	$9p$	$^2P^\circ$	3/2	96WAN
727 257	1	$8f$	$^2F^\circ$	5/2	96WAN
727 403	1	$8f$	$^2F^\circ$	7/2	96WAN
735 070	0	$9d$	^2D	3/2	96WAN
735 510	0	$9d$	^2D	5/2	96WAN
743 475	0	$8g$	^2G	7/2	96WAN
743 475	0	$8g$	^2G	9/2	96WAN

Energy levels of Xe VIII—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
744 798	1	$8h$	$^2H^\circ$	9/2	96WAN
744 798	1	$8h$	$^2H^\circ$	11/2	96WAN
744 953	0	$8i$	^2I	11/2	96WAN
744 953	0	$8i$	^2I	13/2	96WAN
744 993	1	$8k$	$^2K^\circ$	13/2	96WAN
744 993	1	$8k$	$^2K^\circ$	15/2	96WAN
755 719	1	$9f$	$^2F^\circ$	5/2	96WAN
755 757	1	$9f$	$^2F^\circ$	7/2	96WAN
766 889	0	$9g$	^2G	9/2	96WAN
767 897	1	$9h$	$^2H^\circ$	9/2	96WAN
767 897	1	$9h$	$^2H^\circ$	11/2	96WAN
768 009	0	$9i$	^2I	11/2	96WAN
768 009	0	$9i$	^2I	13/2	96WAN
768 033	1	$9k$	$^2K^\circ$	13/2	96WAN
768 033	1	$9k$	$^2K^\circ$	15/2	96WAN
768 039	0	$9l$	^2L	15/2	96WAN
768 039	0	$9l$	^2L	17/2	96WAN
784 510	0	$10i$	^2I	11/2	96WAN
784 510	0	$10i$	^2I	13/2	96WAN
784 528	1	$10k$	$^2K^\circ$	13/2	96WAN
784 528	1	$10k$	$^2K^\circ$	15/2	96WAN
811 260	1	$4d^9 5s(^3D)4f$	$^2P^\circ$	1/2	02CHU
811 400	1	$4d^9 5s(^3D)4f$	$^2P^\circ$	3/2	02CHU

Spectral lines of Xe VIII

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
123.243	811.405	20	$5s$	^2S	1/2	–	$4d^9 5s(^3D)4f$	$^2P^\circ$	3/2	0.003	02CHU
123.265	811.260	15	$5s$	^2S	1/2	–	$4d^9 5s(^3D)4f$	$^2P^\circ$	1/2	0.003	02CHU
166.674	599.974	15	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^1P^\circ_1)$	$(3/2,^1P^\circ_1)$	1/2	0.005	84KAU
170.856	585.288	100	$5s$	^2S	1/2	–	$4d^9(^2D_{5/2})5s5p(^1P^\circ_1)$	$(5/2,^1P^\circ_1)$	3/2	0.005	84KAU
174.147	574.228	5	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^3P^\circ_2)$	$(3/2,^3P^\circ_2)$	3/2	0.005	84KAU
175.872	568.595	3	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^3P^\circ_2)$	$(3/2,^3P^\circ_2)$	1/2	0.005	84KAU
177.258	564.149	35	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^3P^\circ_1)$	$(3/2,^3P^\circ_1)$	1/2	0.005	84KAU
177.707	562.724	50	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^3P^\circ_1)$	$(3/2,^3P^\circ_1)$	3/2	0.005	84KAU
179.656	556.619	30	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^3P^\circ_0)$	$(3/2,^3P^\circ_0)$	3/2	0.005	84KAU
180.142	555.118	5	$5s$	^2S	1/2	–	$4d^9(^2D_{5/2})5s5p(^3P^\circ_2)$	$(5/2,^3P^\circ_2)$	1/2	0.005	84KAU
181.670	550.449	10	$5s$	^2S	1/2	–	$4d^9(^2D_{3/2})5s5p(^3P^\circ_0)$	$(3/2,^3P^\circ_0)$	3/2	0.005	84KAU
184.655	541.550	10	$5s$	^2S	1/2	–	$4d^9(^2D_{5/2})5s5p(^3P^\circ_1)$	$(5/2,^3P^\circ_1)$	3/2	0.005	84KAU
221.841	450.773	15	$5s$	^2S	1/2	–	$6p$	$^2P^\circ$	3/2	0.005	81KAU
222.79	448.85	40b	$5p$	$^2P^\circ$	1/2	–	$7s$	^2S	1/2	0.02	79ROB
225.541	443.378	10	$5s$	^2S	1/2	–	$6p$	$^2P^\circ$	1/2	0.005	81KAU
232.426	430.244	1	$5p$	$^2P^\circ$	3/2	–	$7s$	^2S	1/2	0.005	81KAU
255.32	391.67	40	$4f$	$^2F^\circ$	5/2	–	$6g$	^2G	7/2	0.02	79ROB
255.68	391.11	50	$4f$	$^2F^\circ$	7/2	–	$6g$	^2G	9/2	0.02	79ROB
327.833	305.033	2	$4f$	$^2F^\circ$	5/2	–	$5g$	^2G	7/2	0.005	81KAU
328.430	304.479	5	$4f$	$^2F^\circ$	7/2	–	$5g$	^2G	9/2	0.005	81KAU
358.384	279.030	4	$5p$	$^2P^\circ$	1/2	–	$6s$	^2S	1/2	0.005	81KAU
383.99	260.423	70b	$5p$	$^2P^\circ$	3/2	–	$6s$	^2S	1/2	0.02	79ROB
499.8	200.08	CBS	$6d$	^2D	3/2	–	$8f$	$^2F^\circ$	5/2	0.4	96WAN
502.7	198.93	CBS	$6d$	^2D	5/2	–	$8f$	$^2F^\circ$	7/2	0.4	96WAN
517.007	193.4210	50	$5p$	$^2P^\circ$	1/2	–	$5d$	^2D	3/2	0.005	81KAU

Spectral lines of Xe VIII—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
525.3	190.37	CBS*	$6d$	^{2}D	5/2	–	$9p$	^{2}P°	3/2	0.4	96WAN
525.3	190.37	CBS*	$6d$	^{2}D	3/2	–	$9p$	^{2}P°	1/2	0.4	96WAN
532.791	187.6909	1	$5d$	^{2}D	3/2	–	$5f$	^{2}F°	5/2	0.005	81KAU
540.04	185.171	50	$5d$	^{2}D	5/2	–	$5f$	^{2}F°	7/2	0.02	79ROB
541.29	184.744	10	$5d$	^{2}D	5/2	–	$5f$	^{2}F°	5/2	0.02	79ROB
562.547	177.7629	50	$5p$	^{2}P°	3/2	–	$5d$	^{2}D	5/2	0.005	81KAU
571.894	174.8576	5	$5p$	^{2}P°	3/2	–	$5d$	^{2}D	3/2	0.005	81KAU
628.6	159.08	CES*	$5f$	^{2}F°	5/2	–	$6g$	^{2}G	7/2	0.5	95DRU
628.6	159.08	CES*	$5f$	^{2}F°	7/2	–	$6g$	^{2}G	9/2	0.5	95DRU
636.5	157.11	CBS	$6d$	^{2}D	3/2	–	$7f$	^{2}F°	5/2	0.4	96WAN
665.7	150.22	CBS	$6f$	^{2}F°	7/2	–	$9g$	^{2}G	9/2	0.4	96WAN
709.9	140.86	CBS*	$5d$	^{2}D	3/2	–	$6p$	^{2}P°	3/2	0.4	96WAN
709.9	140.86	CBS*	$5g$	^{2}G	7/2	–	$7h$	^{2}H°	9/2	0.4	96WAN
709.9	140.86	CBS*	$5g$	^{2}G	9/2	–	$7h$	^{2}H°	11/2	0.4	96WAN
724.96	137.939	10	$5d$	^{2}D	5/2	–	$6p$	^{2}P°	3/2	0.02	79ROB
740.458	135.0515	500	$5s$	^{2}S	1/2	–	$5p$	^{2}P°	3/2	0.005	81KAU
749.2	133.48	CBS	$5d$	^{2}D	3/2	–	$6p$	^{2}P°	1/2	0.4	96WAN
820.0	121.95	CBS	$6p$	^{2}P°	1/2	–	$7s$	^{2}S	1/2	0.4	96WAN
825.7	121.11	CBS	$7d$	^{2}D	3/2	–	$9f$	^{2}F°	5/2	0.4	96WAN
830.7	120.38	CBS	$7d$	^{2}D	5/2	–	$9f$	^{2}F°	7/2	0.4	96WAN
858.607	116.4677	500	$5s$	^{2}S	1/2	–	$5p$	^{2}P°	1/2	0.005	81KAU
870.3	114.90	CBS	$7p$	^{2}P°	3/2	–	$9s$	^{2}S	1/2	0.4	96WAN
873.0	114.55	CBS	$6p$	^{2}P°	3/2	–	$7s$	^{2}S	1/2	0.4	96WAN
919.3	108.78	CBS*	$6h$	^{2}H°	11/2	–	$9i$	^{2}I	13/2	0.4	96WAN
919.3	108.78	CBS*	$6h$	^{2}H°	9/2	–	$9i$	^{2}I	11/2	0.4	96WAN
934.7	106.99	CBS	$7s$	^{2}S	1/2	–	$8p$	^{2}P°	3/2	0.4	96WAN
1087.2	91.98	CBS	$7d$	^{2}D	5/2	–	$8f$	^{2}F°	7/2	0.4	96WAN
1124.1	88.96	CBS*	$5g$	^{2}G	7/2	–	$6h$	^{2}H°	9/2	0.4	96WAN
1124.1	88.96	CBS*	$5g$	^{2}G	9/2	–	$6h$	^{2}H°	11/2	0.4	96WAN
1124.1	88.96	CBS*	$6d$	^{2}D	3/2	–	$6f$	^{2}F°	5/2	0.4	96WAN
1166.7	85.71	CBS*	$6h$	^{2}H°	9/2	–	$8i$	^{2}I	11/2	0.6	96WAN
1166.7	85.71	CBS*	$6h$	^{2}H°	11/2	–	$8i$	^{2}I	13/2	0.6	96WAN
1190.0	84.03	CBS	$6p$	^{2}P°	1/2	–	$6d$	^{2}D	3/2	0.6	96WAN
1200.3	83.31	CBS	$7d$	^{2}D	3/2	–	$9p$	^{2}P°	1/2	0.6	96WAN
1251.0	79.94	CBS*	$6f$	^{2}F°	7/2	–	$8d$	^{2}D	5/2	0.6	96WAN
1251.0	79.94	CBS*	$6f$	^{2}F°	5/2	–	$8d$	^{2}D	3/2	0.6	96WAN
1281.7	78.02	CBS	$6p$	^{2}P°	3/2	–	$6d$	^{2}D	5/2	0.5	95LAR
1304.6	76.65	CBS	$6p$	^{2}P°	3/2	–	$6d$	^{2}D	3/2	0.5	95LAR
1363.1	73.36	CBS*	$7h$	^{2}H°	9/2	–	$10i$	^{2}I	11/2	0.6	96WAN
1363.1	73.36	CBS*	$7h$	^{2}H°	11/2	–	$10i$	^{2}I	13/2	0.6	96WAN
1365.4	73.24	CBS*	$7i$	^{2}I	13/2	–	$10k$	^{2}K°	15/2	0.6	96WAN
1365.4	73.24	CBS*	$7i$	^{2}I	11/2	–	$10k$	^{2}K°	13/2	0.6	96WAN
1375.9	72.68	BF	$5f$	^{2}F°	5/2	–	$5g$	^{2}G	7/2	0.5	81BAS
1384.1	72.25	BF	$5f$	^{2}F°	7/2	–	$5g$	^{2}G	9/2	0.5	81BAS
1418.8	70.48	CBS	$6g$	^{2}G	9/2	–	$8f$	^{2}F°	7/2	0.6	96WAN
1507.2	66.35	CBS	$6d$	^{2}D	3/2	–	$7p$	^{2}P°	3/2	0.5	95LAR
1535.4	65.13	CBS*	$7p$	^{2}P°	1/2	–	$8s$	^{2}S	1/2	0.6	96WAN
1535.4	65.13	CBS*	$8p$	^{2}P°	1/2	–	$9d$	^{2}D	3/2	0.6	96WAN
1538.6	64.99	CBS	$6d$	^{2}D	5/2	–	$7p$	^{2}P°	3/2	0.5	95LAR
1580.0	63.29	CBS	$8p$	^{2}P°	3/2	–	$9d$	^{2}D	5/2	0.6	96WAN
1591.8	62.82	CBS	$8s$	^{2}S	1/2	–	$9p$	^{2}P°	1/2	0.6	96WAN
1602.5	62.402	CBS	$6d$	^{2}D	3/2	–	$7p$	^{2}P°	1/2	0.5	95LAR
1684.6	59.36	CBS	$8d$	^{2}D	3/2	–	$9f$	^{2}F°	5/2	0.6	96WAN
1691.8	59.11	CBS	$8d$	^{2}D	5/2	–	$9f$	^{2}F°	7/2	0.6	96WAN
1708.2	58.54	CBS*	$7g$	^{2}G	9/2	–	$9h$	^{2}H°	11/2	0.6	96WAN
1708.2	58.54	CBS*	$7g$	^{2}G	7/2	–	$9h$	^{2}H°	9/2	0.6	96WAN
1758.3	56.873	CBS*	$7h$	^{2}H°	11/2	–	$9i$	^{2}I	13/2	0.6	96WAN
1758.3	56.873	CBS*	$7h$	^{2}H°	9/2	–	$9i$	^{2}I	11/2	0.6	96WAN
1763.8	56.696	CBS*	$7i$	^{2}I	11/2	–	$9k$	^{2}K°	13/2	0.6	96WAN
1763.8	56.696	CBS*	$7i$	^{2}I	13/2	–	$9k$	^{2}K°	15/2	0.6	96WAN
1808.7	55.288	CBS	$6s$	^{2}S	1/2	–	$6p$	^{2}P°	3/2	0.5	95LAR
1844.6	54.212	BF*	$6g$	^{2}G	7/2	–	$7h$	^{2}H°	9/2	0.5	81BAS
1844.6	54.212	BF*	$6g$	^{2}G	9/2	–	$7h$	^{2}H°	11/2	0.5	81BAS
1919.1	52.108	BF*	$6h$	^{2}H°	9/2	–	$7i$	^{2}I	11/2	0.5	81BAS
1919.1	52.108	BF*	$6h$	^{2}H°	11/2	–	$7i$	^{2}I	13/2	0.5	81BAS
1971.7	50.718	CBS	$7f$	^{2}F°	7/2	–	$9d$	^{2}D	5/2	0.6	96WAN
1998.4	50.040	CBS	$7d$	^{2}D	3/2	–	$7f$	^{2}F°	5/2	0.6	96WAN

Spectral lines of Xe VIII—Continued

Observed air wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2021.0	49.465	CBS	$7d$	^{2}D	5/2	–	$7f$	^{2}F°	7/2	0.6	96WAN
2087.3	47.894	CBS	$6s$	^{2}S	1/2	–	$6p$	^{2}P°	1/2	0.5	95LAR
2122.2	47.106	CBS	$4f$	^{2}F°	7/2	–	$5d$	^{2}D	5/2	0.5	95LAR
2154.9	46.391	CBS	$7g$	^{2}G	9/2	–	$9f$	^{2}F°	7/2	0.6	96WAN
2233.5	44.759	CBS	$7p$	^{2}P°	1/2	–	$7d$	^{2}D	3/2	0.6	96WAN
2235.1	44.727	CBS	$4f$	^{2}F°	5/2	–	$5d$	^{2}D	3/2	0.5	95LAR
2404.6	41.574	CBS	$7p$	^{2}P°	3/2	–	$7d$	^{2}D	5/2	0.6	96WAN
2448.9	40.822	CBS	$7p$	^{2}P°	3/2	–	$7d$	^{2}D	3/2	0.6	96WAN
2467.6	40.513	CBS	$6f$	^{2}F°	5/2	–	$6g$	^{2}G	7/2	0.5	96WAN
2487.8	40.184	CBS	$6f$	^{2}F°	7/2	–	$6g$	^{2}G	9/2	0.6	96WAN
2516.8	39.721	CBS*	$8h$	^{2}H°	9/2	–	$10i$	^{2}I	11/2	0.8	96WAN
2516.8	39.721	CBS*	$8h$	^{2}H°	11/2	–	$10i$	^{2}I	13/2	0.8	96WAN
2526.4	39.570	CBS*	$8i$	^{2}I	13/2	–	$10k$	^{2}K°	15/2	0.8	96WAN
2526.4	39.570	CBS*	$8i$	^{2}I	11/2	–	$10k$	^{2}K°	13/2	0.8	96WAN
2710.6	36.881	CBS	$7d$	^{2}D	5/2	–	$8p$	^{2}P°	3/2	0.8	96WAN
2737.9	36.514	CBS	$8p$	^{2}P°	3/2	–	$9s$	^{2}S	1/2	0.8	96WAN
2821.0	35.438	CBS*	$7g$	^{2}G	7/2	–	$8h$	^{2}H°	9/2	0.8	96WAN
2821.0	35.438	CBS*	$7g$	^{2}G	9/2	–	$8h$	^{2}H°	11/2	0.8	96WAN
2829.0	35.338	CBS	$7d$	^{2}D	3/2	–	$8p$	^{2}P°	1/2	0.8	96WAN
2953.2	33.852	bBF*	$7h$	^{2}H°	9/2	–	$8i$	^{2}I	11/2	0.5	81BAS
2953.2	33.852	bBF*	$7h$	^{2}H°	11/2	–	$8i$	^{2}I	13/2	0.5	81BAS
2970.7	33.652	BF*	$7i$	^{2}I	11/2	–	$8k$	^{2}K°	13/2	0.5	81BAS
2970.7	33.652	BF*	$7i$	^{2}I	13/2	–	$8k$	^{2}K°	15/2	0.5	81BAS
3229.8	30.953	CBS	$8d$	^{2}D	3/2	–	$8f$	^{2}F°	5/2	0.8	96WAN
3248.4	30.776	CBS	$5f$	^{2}F°	7/2	–	$6d$	^{2}D	5/2	0.8	96WAN
3253.7	30.725	CBS	$8d$	^{2}D	5/2	–	$8f$	^{2}F°	7/2	0.8	96WAN
3351.2	29.831	CBS	$5f$	^{2}F°	5/2	–	$6d$	^{2}D	3/2	0.8	96WAN
3511.6	28.469	CBS	$7s$	^{2}S	1/2	–	$7p$	^{2}P°	3/2	0.8	96WAN
4079.0	24.509	CBS*	$7s$	^{2}S	1/2	–	$7p$	^{2}P°	1/2	0.8	96WAN
4079.0	24.509	CBS*	$8p$	^{2}P°	3/2	–	$8d$	^{2}D	5/2	0.8	96WAN
4093.5	24.422	CBS*	$8g$	^{2}G	7/2	–	$9h$	^{2}H°	9/2	0.8	96WAN
4093.5	24.422	CBS*	$8g$	^{2}G	9/2	–	$9h$	^{2}H°	11/2	0.8	96WAN
4307.1	23.211	CBS*	$8h$	^{2}H°	11/2	–	$9i$	^{2}I	13/2	0.8	96WAN
4307.1	23.211	CBS*	$8h$	^{2}H°	9/2	–	$9i$	^{2}I	11/2	0.8	96WAN
4331.6	23.080	CBS*	$8i$	^{2}I	11/2	–	$9k$	^{2}K°	13/2	0.8	96WAN
4331.6	23.080	CBS*	$8i$	^{2}I	13/2	–	$9k$	^{2}K°	15/2	0.8	96WAN
4337.9	23.046	CBS*	$8k$	^{2}K°	13/2	–	$9l$	^{2}L	15/2	0.8	96WAN
4337.9	23.046	CBS*	$8k$	^{2}K°	15/2	–	$9l$	^{2}L	17/2	0.8	96WAN
4423.7	22.599	CBS	$8d$	^{2}D	5/2	–	$9p$	^{2}P°	3/2	0.8	96WAN
4642.4	21.535	CBS	$8d$	^{2}D	3/2	–	$9p$	^{2}P°	1/2	0.8	96WAN
4841.4	20.649	CBS	$9d$	^{2}D	3/2	–	$9f$	^{2}F°	5/2	0.8	96WAN
4937.6	20.247	CBS	$9d$	^{2}D	5/2	–	$9f$	^{2}F°	7/2	0.8	96WAN
5819.5	17.179	CBS	$8s$	^{2}S	1/2	–	$8p$	^{2}P°	3/2	0.8	96WAN

4.9. Xe IX

Pd isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10}\,{}^1S_0$

Ionization energy 1 450 500±1 000 cm^{-1} (179.85±0.10 eV) [02CHU$_a$]

An analysis of the spectrum of eight times ionized xenon, Xe IX, Pd-like xenon was published by Churilov *et al.* [02CHU$_b$]. The uncertainty of their levels is about 20 cm^{-1} with respect to the ground state and 5 cm^{-1} relative to other levels. Five additional levels (those involving the $4d^9 6p$, $4d^9 7p$, and $4d^9 6f$ configurations) are from Churilov and Joshi [02CHU$_a$] with uncertainties of about 20 cm^{-1} for levels below 1 100 000 cm^{-1} and 75 cm^{-1} for higher levels. We do not use the levels reported by Callegari *et al.* [02CAL] because they disagree with [02CHU$_b$] for most levels other than those belonging to the $4d^9 5p$ configuration. The LS designation for some levels has very little physical significance and may not even be the largest eigenvector component.

Churilov *et al.* [02CHU$_b$] was the source of 108 classified Xe IX lines in our Xe IX line list. They used a fast 40 kV capillary discharge with inductive storage as their source. The uncertainty of their wavelength measurements is 0.003 Å at wavelengths between 90–150 Å and 0.007–0.010 Å at wavelengths between 300 and 800 Å, respectively.

Churilov and Joshi [02CHU$_a$] was the source of five Xe IX classified resonance lines in the list. They remeasured the spectrograms of [83KAU] using improved measurement techniques. The uncertainty of their wavelength measurements is 0.003 Å at wavelengths longer than 90 and 0.006 Å

TABLE 7. Sources of Xe VIII lines.

Source	Number of classifications	Light source	Wavelength range (Å)	Uncertainty (Å)
79ROB	7	theta pinch	223–725	0.02
81BAS	10	beam-foil spectroscopy	1376–2971	0.5
81KAU	12	modified triggered spark initiated by a puff of Xe gas	222–859	0.005
84KAU	10	high-voltage spark discharge	167–185	0.005
95DRU	2	charge-exchange spectroscopy	629	0.5
95LAR	9	collision-based spectroscopy	1282–2235	0.5
96WAN	83	collision-based spectroscopy	500–5820	0.4–0.8
02CHU	2	modified triggered spark initiated by a puff of Xe gas	123	0.003

at shorter wavelengths. [83KAU] used a modified triggered spark initiated by a puff of xenon gas as their source.

Callegari *et al.* [02CAL] was the source of 31 line classifications in our list. They classified 109 lines but only 61 of them are consistent with the energy levels chosen above. They used a capillary pulsed discharge as their source. The uncertainty of their wavelength measurements is 0.02 Å.

Where duplicate lines exist, the priority order used for selection was [$02CHU_b$], [$02CHU_a$], then [02CAL]. Earlier work with greater wavelength uncertainty was carried out by [61FAW], [64FAW], [82SUG], [82OSU], [83BLA], [94KAM], and [96LEM]. Any lines from these references were superseded by those from the three above.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe IX levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] with adjusted configuration average energies are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated references and are not on a common scale.

The intensity codes given in the Xe IX line table are taken from the specified sources. Their meaning is stated below:

Symbol	Definition
m	masked line
b	blend
?	tentative classification
*	two or more classifications of this line share the same intensity

The ionization energy was determined by Churilov and Joshi [$02CHU_a$] by means of spectral analysis.

References

61FAW B. C. Fawcett, B. B. Jones, and R. Wilson, Proc. Phys. Soc. London **78**, 1223 (1961).

64FAW B. C. Fawcett, A. H. Gabriel, B. B. Jones, and N. J. Peacock, Proc. Phys. Soc. London **84**, 257 (1964).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

82OSU G. O'Sullivan, J. Phys. B **15**, L765 (1982).

82SUG J. Sugar and V. Kaufman, Phys. Scr. **26**, 419 (1982).

83BLA J. Blackburn, P. K. Carroll, J. Costello, and G. O'Sullivan, J. Opt. Soc. Am. **73**, 1325 (1983).

83KAU V. Kaufman, J. Sugar, and J. L. Tech, J. Opt. Soc. Am. **73**, 691 (1983).

94KAM P. van Kampen, R. Hallin, F. Heijkenskjöld, A. Langereis, M. O. Larsson, C. Nordling, B. Nyström, G. O'Sullivan, and A. Wännström, Phys. Scr. **49**, 198 (1994).

96LEM B. E. Lemoff, G. Y. Yin, C. L. Gordon III, C. P. J. Barty, and S. E. Harris, J. Opt. Soc. Am. B **13**, 180 (1996).

02CAL F. Callegari, M. Gallardo, M. Raineri, A. G. Trigueiros, and J. G. Reyna Almandos, J. Quant. Spectrosc. Radiat. Transfer **73**, 13 (2002).

$02CHU_a$ S. S. Churilov and Y. N. Yoshi, Phys. Scr. **65**, 40 (2002).

$02CHU_b$ S. S. Churilov, A. N. Ryabtsev, W.-Ü. L. Tchang-Brillet, and J.-F. Wyart, Phys. Scr. **66**, 293 (2002).

Energy levels of Xe IX

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$4d^{10}$	^1S	0	$02CHU_b$
453 468.	0	$4d^9 5s$	^3D	3	$02CHU_b$
456 956.	0	$4d^9 5s$	^3D	2	$02CHU_b$
470 048.	0	$4d^9 5s$	^3D	1	$02CHU_b$

Energy levels of Xe IX—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
473 496.	0	$4d^9 5s$	^{1}D	2	02CHU$_b$
575 438.	1	$4d^9 5p$	^{3}P°	2	02CHU$_b$
578 986.	1	$4d^9 5p$	^{3}F°	3	02CHU$_b$
593 154.	1	$4d^9 5p$	^{3}F°	2	02CHU$_b$
594 522.	1	$4d^9 5p$	^{3}P°	1	02CHU$_b$
596 854.	1	$4d^9 5p$	^{3}F°	4	02CHU$_b$
602 541.	1	$4d^9 5p$	^{1}D°	2	02CHU$_b$
604 877.	1	$4d^9 5p$	^{1}P°	1	02CHU$_b$
605 410.	1	$4d^9 5p$	^{3}D°	3	02CHU$_b$
607 906.	1	$4d^9 5p$	^{3}P°	0	02CHU$_b$
616 157.	1	$4d^9 5p$	^{1}F°	3	02CHU$_b$
618 269.	1	$4d^9 5p$	^{3}D°	1	02CHU$_b$
621 147.	1	$4d^9 5p$	^{3}D°	2	02CHU$_b$
665 447.?	1	$4d^9 4f$	^{3}P°	1	02CHU$_b$
696 312.	1	$4d^9 4f$	^{3}D°	1	02CHU$_b$
832 414.	1	$4d^9 4f$	^{1}P°	1	02CHU$_b$
780 792.	0	$4d^9 5d$	^{3}S	1	02CHU$_b$
788 522.	0	$4d^9 5d$	^{3}G	4	02CHU$_b$
790 022.	0	$4d^9 5d$	^{3}D	2	02CHU$_b$
790 742.	0	$4d^9 5d$	^{3}G	5	02CHU$_b$
790 854.	0	$4d^9 5d$	^{1}P	1	02CHU$_b$
792 488.	0	$4d^9 5d$	^{3}D	3	02CHU$_b$
795 332.	0	$4d^9 5d$	^{1}F	3	02CHU$_b$
796 070.	0	$4d^9 5d$	^{3}P	2	02CHU$_b$
797 063.	0	$4d^9 5d$	^{3}F	4	02CHU$_b$
798 896.	0	$4d^9 5d$	^{3}P	0	02CHU$_b$
803 860.	0	$4d^9 5d$	^{3}P	1	02CHU$_b$
805 240.	0	$4d^9 5d$	^{3}G	3	02CHU$_b$
807 691.	0	$4d^9 5d$	^{3}D	1	02CHU$_b$
809 314.	0	$4d^9 5d$	^{1}G	4	02CHU$_b$
810 825.	0	$4d^9 5d$	^{1}D	2	02CHU$_b$
811 675.	0	$4d^9 5d$	^{3}F	2	02CHU$_b$
813 696.	0	$4d^9 5d$	^{3}F	3	02CHU$_b$
843 962.	0	$4d^9 5d$	^{1}S	0	02CHU$_b$
963 320.	1	$4d^9 6p$	^{3}P°	1	02CHU$_a$
972 620.	1	$4d^9 6p$	^{1}P°	1	02CHU$_a$
995 359.	1	$4d^9 5f$	^{3}H°	6	02CHU$_b$
995 961.	1	$4d^9 5f$	^{3}H°	5	02CHU$_b$
998 024.	1	$4d^9 5f$	^{1}D°	2	02CHU$_b$
998 220.	1	$4d^9 5f$	^{3}F°	3	02CHU$_b$
998 989.	1	$4d^9 5f$	^{3}F°	4	02CHU$_b$
999 785.	1	$4d^9 5f$	^{1}G°	4	02CHU$_b$
1 000 432.	1	$4d^9 5f$	^{3}G°	5	02CHU$_b$
1 001 354.	1	$4d^9 5f$	^{1}F°	3	02CHU$_b$
1 004 493.	1	$4d^9 5f$	^{3}D°	1	02CHU$_b$
1 012 122.	1	$4d^9 5f$	^{3}H°	4	02CHU$_b$
1 013 161.?	1	$4d^9 5f$	^{1}H°	5	02CHU$_b$
1 014 147.	1	$4d^9 5f$	^{3}F°	2	02CHU$_b$
1 015 439.	1	$4d^9 5f$	^{3}D°	3	02CHU$_b$
1 017 029.	1	$4d^9 5f$	^{3}G°	4	02CHU$_b$
1 017 377.	1	$4d^9 5f$	^{3}G°	3	02CHU$_b$
1 036 821.	1	$4d^9 5f$	^{1}P°	1	02CHU$_b$
1 130 660	1	$4d^9 7p$	^{3}P°	1	02CHU$_a$
1 142 635?	1	$4d^9 7p$	^{1}P°	1	02CHU$_a$
1 170 685	1	$4d^9 6f$	^{1}P°	1	02CHU$_a$

Spectral lines of Xe IX

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
85.420	1170.69	3	$4d^{10}$	^{1}S	0	–	$4d^9 6f$	^{1}P°	1	0.006	02CHU$_a$
87.517	1142.64	2	$4d^{10}$	^{1}S	0	–	$4d^9 7p$	^{1}P°	1	0.006	02CHU$_a$
88.444	1130.66	5?	$4d^{10}$	^{1}S	0	–	$4d^9 7p$	^{3}P°	1	0.006	02CHU$_a$
96.449	1036.82	35	$4d^{10}$	^{1}S	0	–	$4d^9 5f$	^{1}P°	1	0.003	02CHU$_b$
99.553	1004.49	10	$4d^{10}$	^{1}S	0	–	$4d^9 5f$	^{3}D°	1	0.003	02CHU$_b$
102.815	972.62	10	$4d^{10}$	^{1}S	0	–	$4d^9 6p$	^{1}P°	1	0.003	02CHU$_a$
103.808	963.32	12	$4d^{10}$	^{1}S	0	–	$4d^9 6p$	^{3}P°	1	0.003	02CHU$_a$
120.133	832.41	200	$4d^{10}$	^{1}S	0	–	$4d^9 4f$	^{1}P°	1	0.003	02CHU$_b$
143.614	696.311	90	$4d^{10}$	^{1}S	0	–	$4d^9 4f$	^{3}D°	1	0.003	02CHU$_b$
150.275	665.447	5	$4d^{10}$	^{1}S	0	–	$4d^9 4f$	^{3}P°	1	0.003	02CHU$_b$
161.742	618.269	650	$4d^{10}$	^{1}S	0	–	$4d^9 5p$	^{3}D°	1	0.003	02CHU$_b$
165.323	604.877	950	$4d^{10}$	^{1}S	0	–	$4d^9 5p$	^{1}P°	1	0.003	02CHU$_b$
400.906	249.435	26	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{1}S	0	0.007	02CHU$_b$
418.257	239.087	171	$4d^9 5p$	^{1}P°	1	–	$4d^9 5d$	^{1}S	0	0.007	02CHU$_b$
426.07	234.703	2	$4d^9 5p$	^{3}F°	3	–	$4d^9 5d$	^{3}F	3	0.02	02CAL
430.52	232.277	2	$4d^9 5p$	^{3}P°	2	–	$4d^9 5d$	^{3}D	1	0.02	02CAL
435.12	229.822	1	$4d^9 5p$	^{3}P°	2	–	$4d^9 5d$	^{3}G	3	0.02	02CAL
436.41	229.142	1	$4d^9 5d$	^{3}D	1	–	$4d^9 5f$	^{1}P°	1	0.02	02CAL
442.52	225.978	2	$4d^9 5d$	^{1}D	2	–	$4d^9 5f$	^{1}P°	1	0.02	02CAL
443.080	225.693	31	$4d^9 5p$	^{3}D°	1	–	$4d^9 5d$	^{1}S	0	0.007	02CHU$_b$
444.23	225.109	9	$4d^9 5d$	^{3}F	2	–	$4d^9 5f$	^{1}P°	1	0.02	02CAL
450.44	222.005	1	$4d^9 5d$	^{1}F	3	–	$4d^9 5f$	^{3}G°	3	0.02	02CAL
454.32	220.109	1	$4d^9 5d$	^{1}F	3	–	$4d^9 5f$	^{3}D°	3	0.02	02CAL
457.624	218.520	90	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{3}F	2	0.007	02CHU$_b$
458.54	218.083	1*	$4d^9 5d$	^{3}P	2	–	$4d^9 5f$	^{3}F°	2	0.02	02CAL
458.54	218.083	1*	$4d^9 5p$	^{3}F°	3	–	$4d^9 5d$	^{3}F	4	0.02	02CAL
459.407	217.672	99	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{1}D	2	0.007	02CHU$_b$
460.719	217.052	224	$4d^9 5p$	^{3}P°	2	–	$4d^9 5d$	^{3}D	3	0.007	02CHU$_b$
462.229	216.343	102	$4d^9 5p$	^{3}F°	3	–	$4d^9 5d$	^{1}F	3	0.007	02CHU$_b$
462.319	216.301	83	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{1}D	2	0.007	02CHU$_b$
464.19	215.429	4	$4d^9 5p$	^{3}P°	2	–	$4d^9 5d$	^{1}P	1	0.02	02CAL
466.010	214.588	300m	$4d^9 5p$	^{3}P°	2	–	$4d^9 5d$	^{3}D	2	0.007	02CHU$_b$
466.09	214.551	3	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{3}D	1	0.02	02CAL
468.386	213.499	223	$4d^9 5p$	^{3}F°	3	–	$4d^9 5d$	^{3}D	3	0.007	02CHU$_b$
469.10	213.174	5	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{3}D	1	0.02	02CAL
470.64	212.477	4	$4d^9 5p$	^{3}F°	4	–	$4d^9 5d$	^{1}G	4	0.02	02CAL
471.498	212.090	276	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{3}G	3	0.007	02CHU$_b$
473.864	211.031	66	$4d^9 5p$	^{3}F°	3	–	$4d^9 5d$	^{3}D	2	0.007	02CHU$_b$
474.601	210.703	55	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{3}P	1	0.007	02CHU$_b$
475.12	210.473	1b	$4d^9 5d$	^{3}G	4	–	$4d^9 5f$	^{3}F°	4	0.02	02CAL
476.892	209.691	103	$4d^9 5d$	^{3}G	5	–	$4d^9 5f$	^{3}G°	5	0.008	02CHU$_b$
477.240	209.538	374	$4d^9 5p$	^{3}F°	3	–	$4d^9 5d$	^{3}G	4	0.008	02CHU$_b$
477.685	209.343	115	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{3}P	1	0.008	02CHU$_b$
478.10	209.161	1	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{3}F	2	0.02	02CAL
480.08	208.299	4b*	$4d^9 5p$	^{3}D°	3	–	$4d^9 5d$	^{3}F	3	0.02	02CAL
480.08	208.299	4b*	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{1}D	2	0.02	02CAL
480.20	208.247	1	$4d^9 5d$	^{3}G	5	–	$4d^9 5f$	^{3}F°	4	0.02	02CAL
480.313	208.198	59	$4d^9 5d$	^{3}D	2	–	$4d^9 5f$	^{3}F°	3	0.008	02CHU$_b$
482.068	207.440	160	$4d^9 5d$	^{3}G	4	–	$4d^9 5f$	^{3}H°	5	0.008	02CHU$_b$
482.695	207.170	108	$4d^9 5d$	^{1}P	1	–	$4d^9 5f$	^{1}D°	2	0.008	02CHU$_b$
483.367	206.882	148	$4d^9 5d$	^{3}G	3	–	$4d^9 5f$	^{3}H°	4	0.008	02CHU$_b$
483.556	206.801	73	$4d^9 5p$	^{1}P°	1	–	$4d^9 5d$	^{3}F	2	0.008	02CHU$_b$
484.139	206.552	71	$4d^9 5d$	^{1}D	2	–	$4d^9 5f$	^{3}G°	3	0.008	02CHU$_b$
484.258	206.501	118	$4d^9 5d$	^{3}D	3	–	$4d^9 5f$	^{3}F°	4	0.008	02CHU$_b$
484.365	206.456	142	$4d^9 5d$	^{3}D	1	–	$4d^9 5f$	^{3}F°	2	0.008	02CHU$_b$
485.38	206.024	2	$4d^9 5d$	^{1}F	3	–	$4d^9 5f$	^{1}F°	3	0.02	02CAL
485.56	205.948	5	$4d^9 5p$	^{1}P°	1	–	$4d^9 5d$	^{1}D	2	0.02	02CAL
486.070	205.732	57	$4d^9 5d$	^{3}D	3	–	$4d^9 5f$	^{3}F°	3	0.008	02CHU$_b$
486.30	205.634	4	$4d^9 5d$	^{3}P	0	–	$4d^9 5f$	^{3}D°	1	0.02	02CAL
486.959	205.356	229	$4d^9 5p$	^{3}P°	2	–	$4d^9 5d$	^{3}S	1	0.008	02CHU$_b$
487.131	205.284	123	$4d^9 5d$	^{3}P	2	–	$4d^9 5f$	^{1}F°	3	0.008	02CHU$_b$
487.285	205.219	64	$4d^9 5d$	^{3}G	5	–	$4d^9 5f$	^{3}H°	5	0.008	02CHU$_b$

Spectral lines of Xe IX—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
488.718	204.617	178*	$4d^9 5d$	^{3}G	5	–	$4d^9 5f$	^{3}H°	6	0.008	02CHU$_b$
488.718	204.617	178*	$4d^9 5d$	^{1}D	2	–	$4d^9 5f$	^{3}D°	3	0.008	02CHU$_b$
489.110	204.453	151	$4d^9 5d$	^{1}F	3	–	$4d^9 5f$	^{1}G°	4	0.008	02CHU$_b$
489.300	204.374	85	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{3}P	0	0.008	02CHU$_b$
490.564	203.847	266b	$4d^9 5d$	^{1}G	4	–	$4d^9 5f$	^{1}H°	5	0.008	02CHU$_b$
490.763	203.764	73	$4d^9 5d$	^{3}F	2	–	$4d^9 5f$	^{3}D°	3	0.008	02CHU$_b$
491.719	203.368	232	$4d^9 5d$	^{3}F	4	–	$4d^9 5f$	^{3}G°	5	0.008	02CHU$_b$
491.804	203.333	144	$4d^9 5d$	^{3}F	3	–	$4d^9 5f$	^{3}G°	4	0.008	02CHU$_b$
492.817	202.915	71	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{3}P	2	0.008	02CHU$_b$
493.343	202.699	154	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{3}G	3	0.008	02CHU$_b$
494.614	202.178	169	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{1}F	3	0.008	02CHU$_b$
495.231	201.926	70	$4d^9 5d$	^{3}F	4	–	$4d^9 5f$	^{3}F°	4	0.008	02CHU$_b$
495.68	201.743	3	$4d^9 5d$	^{3}F	3	–	$4d^9 5f$	^{3}D°	3	0.02	02CAL
496.162	201.547	69	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{3}P	2	0.008	02CHU$_b$
499.478	200.209	100	$4d^9 5p$	^{3}F°	4	–	$4d^9 5d$	^{3}F	4	0.008	02CHU$_b$
500.532	199.787	79	$4d^9 5p$	^{3}P°	0	–	$4d^9 5d$	^{3}D	1	0.008	02CHU$_b$
501.679	199.331	30	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{3}D	3	0.008	02CHU$_b$
502.566	198.979	46	$4d^9 5p$	^{1}P°	1	–	$4d^9 5d$	^{3}P	1	0.008	02CHU$_b$
503.84	198.476	3	$4d^9 5p$	^{3}F°	4	–	$4d^9 5d$	^{1}F	3	0.02	02CAL
505.821	197.698	51	$4d^9 5p$	^{3}F°	2	–	$4d^9 5d$	^{1}P	1	0.008	02CHU$_b$
506.230	197.539	309	$4d^9 5p$	^{1}F°	3	–	$4d^9 5d$	^{3}F	3	0.008	02CHU$_b$
509.332	196.336	133	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{1}P	1	0.008	02CHU$_b$
510.30	195.963	4	$4d^9 5p$	^{3}P°	0	–	$4d^9 5d$	^{3}P	1	0.02	02CAL
511.159	195.634	94	$4d^9 5p$	^{3}F°	4	–	$4d^9 5d$	^{3}D	3	0.008	02CHU$_b$
511.52	195.496	2	$4d^9 5p$	^{3}P°	1	–	$4d^9 5d$	^{3}D	2	0.02	02CAL
515.11	194.133	3	$4d^9 5d$	^{3}P	1	–	$4d^9 5f$	^{1}D°	2	0.02	02CAL
515.762	193.888	457	$4d^9 5p$	^{3}F°	4	–	$4d^9 5d$	^{3}G	5	0.008	02CHU$_b$
516.17	193.735	6	$4d^9 5d$	^{3}G	3	–	$4d^9 5f$	^{3}F°	4	0.02	02CAL
516.714	193.531	185	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{3}P	2	0.008	02CHU$_b$
517.050	193.405	350m	$4d^9 5p$	^{3}D°	1	–	$4d^9 5d$	^{3}F	2	0.008	02CHU$_b$
517.714	193.157	354	$4d^9 5p$	^{1}F°	3	–	$4d^9 5d$	^{1}G	4	0.008	02CHU$_b$
518.23	192.965	4b	$4d^9 5d$	^{3}G	3	–	$4d^9 5f$	^{3}F°	3	0.02	02CAL
518.700	192.790	346	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{1}F	3	0.008	02CHU$_b$
519.347	192.549	393	$4d^9 5p$	^{3}D°	2	–	$4d^9 5d$	^{3}F	3	0.008	02CHU$_b$
521.730	191.670	150	$4d^9 5p$	^{3}F°	4	–	$4d^9 5d$	^{3}G	4	0.008	02CHU$_b$
521.783	191.651	538	$4d^9 5p$	^{3}D°	3	–	$4d^9 5d$	^{3}F	4	0.008	02CHU$_b$
523.037	191.191	173	$4d^9 5p$	^{1}P°	1	–	$4d^9 5d$	^{3}P	2	0.008	02CHU$_b$
523.20	191.131	5	$4d^9 5d$	^{1}G	4	–	$4d^9 5f$	^{3}G°	5	0.02	02CAL
526.523	189.925	205	$4d^9 5p$	^{3}D°	3	–	$4d^9 5d$	^{1}F	3	0.008	02CHU$_b$
527.206	189.679	183	$4d^9 5p$	^{3}D°	2	–	$4d^9 5d$	^{1}D	2	0.008	02CHU$_b$
527.929	189.419	110	$4d^9 5p$	^{3}D°	1	–	$4d^9 5d$	^{3}D	1	0.008	02CHU$_b$
528.876	189.080	119	$4d^9 5p$	^{1}F°	3	–	$4d^9 5d$	^{3}G	3	0.008	02CHU$_b$
531.040	188.310	162	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{1}P	1	0.008	02CHU$_b$
534.528	187.081	195	$4d^9 5p$	^{3}D°	3	–	$4d^9 5d$	^{3}D	3	0.008	02CHU$_b$
537.701	185.977	160	$4d^9 5p$	^{1}P°	1	–	$4d^9 5d$	^{1}P	1	0.008	02CHU$_b$
538.820	185.591	114	$4d^9 5p$	^{3}D°	1	–	$4d^9 5d$	^{3}P	1	0.008	02CHU$_b$
541.665	184.616	100	$4d^9 5p$	^{3}D°	3	–	$4d^9 5d$	^{3}D	2	0.008	02CHU$_b$
546.118	183.111	234	$4d^9 5p$	^{3}D°	3	–	$4d^9 5d$	^{3}G	4	0.008	02CHU$_b$
547.309	182.712	239	$4d^9 5p$	^{3}D°	2	–	$4d^9 5d$	^{3}P	1	0.008	02CHU$_b$
550.21	181.749	1	$4d^9 5d$	^{1}P	1	–	$4d^9 6p$	^{1}P°	1	0.02	02CAL
561.013	178.249	97	$4d^9 5p$	^{1}D°	2	–	$4d^9 5d$	^{3}S	1	0.008	02CHU$_b$
596.379	167.679	61	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{3}D°	2	0.008	02CHU$_b$
609.050	164.190	132	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}D°	2	0.008	02CHU$_b$
614.670	162.689	80	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{1}F°	3	0.008	02CHU$_b$
619.909	161.314	99	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}D°	1	0.008	02CHU$_b$
628.144	159.199	100	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{1}F°	3	0.008	02CHU$_b$
658.146	151.942	470	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{3}D°	3	0.009	02CHU$_b$
661.812	151.100	260	$4d^9 5s$	^{3}D	1	–	$4d^9 5p$	^{3}D°	2	0.009	02CHU$_b$
670.810	149.0735	75	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{1}D°	2	0.009	02CHU$_b$
673.602	148.4556	239	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}D°	3	0.009	02CHU$_b$
674.673	148.2200	244	$4d^9 5s$	^{3}D	1	–	$4d^9 5p$	^{3}D°	1	0.009	02CHU$_b$
676.040	147.9202	200m	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{1}P°	1	0.009	02CHU$_b$

Spectral lines of Xe IX—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
677.280	147.6494	300m	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{3}D°	2	0.009	02CHU$_b$
686.885	145.5848	256	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{1}D°	2	0.009	02CHU$_b$
690.731	144.7742	103	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{3}D°	1	0.009	02CHU$_b$
697.417	143.3862	494	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{3}F°	4	0.009	02CHU$_b$
700.962	142.6611	396	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{1}F°	3	0.009	02CHU$_b$
725.378	137.8592	107	$4d^9 5s$	^{3}D	1	–	$4d^9 5p$	^{3}P°	0	0.009	02CHU$_b$
726.923	137.5662	148	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}P°	1	0.009	02CHU$_b$
734.224	136.1982	80	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}F°	2	0.009	02CHU$_b$
741.683	134.8285	152	$4d^9 5s$	^{3}D	1	–	$4d^9 5p$	^{1}P°	1	0.009	02CHU$_b$
754.770	132.4907	121	$4d^9 5s$	^{3}D	1	–	$4d^9 5p$	^{1}D°	2	0.009	02CHU$_b$
758.066	131.9146	131	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{3}D°	3	0.009	02CHU$_b$
761.125	131.3845	731b	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{1}P°	1	0.009	02CHU$_b$
774.916	129.0462	134	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{1}D°	2	0.009	02CHU$_b$
796.712	125.5159	168	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{3}F°	3	0.009	02CHU$_b$
812.297	123.1077	253	$4d^9 5s$	^{3}D	1	–	$4d^9 5p$	^{3}F°	2	0.010	02CHU$_b$
819.470	122.0301	390	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}F°	3	0.010	02CHU$_b$
819.875	121.9698	404	$4d^9 5s$	^{3}D	3	–	$4d^9 5p$	^{3}P°	2	0.010	02CHU$_b$
826.270	121.0258	258	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{3}P°	1	0.010	02CHU$_b$
835.729	119.6560	224	$4d^9 5s$	^{1}D	2	–	$4d^9 5p$	^{3}F°	2	0.010	02CHU$_b$
844.006	118.4826	149	$4d^9 5s$	^{3}D	2	–	$4d^9 5p$	^{3}P°	2	0.010	02CHU$_b$

4.10. Xe x

Rh isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^9\ ^2D_{5/2}$

Ionization energy 1 627 000 cm^{-1} (201.7 eV) [70CAR]

A partial analysis of the spectrum of nine times ionized xenon, Xe x, was published by Churilov and Joshi [02CHU] based on experimental work of Kaufman *et al.* [83KAU]. They considered the transitions between the $4d^9$ ground configuration and the $4d^8 5p$, $4d^8 4f$, and $4p^5 4d^{10}$ levels. We tabulate the 62 levels they determined in the Xe x level table. The levels have an uncertainty of 10 cm^{-1}. The levels of the excited configurations are very mixed in LS notation and we follow Churilov and Joshi [02CHU] in not specifying a LS designation but assigning them by specifying only the configuration, the integer value of the energy level, the J value, and the odd parity. See [02CHU] for the leading LS terms of each level. The "?" after the 672 762 cm^{-1} $J=7/2$ level indicates that this level is tentative.

Churilov and Joshi [02CHU] classified 83 Xe x lines. They remeasured the spectrograms of [83KAU] using improved measurement techniques. The uncertainty of their wavelength measurements is 0.003 Å. These lines are listed in the Xe x line table.

Kaufman *et al.* [83KAU] classified 47 lines. They used a modified triggered spark initiated by a puff of xenon gas as their source. The quoted uncertainty of their wavelength measurements is 0.005 Å.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe x levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] are used by Churilov and Joshi [02CHU] to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in Churilov and Joshi [02CHU].

The intensity codes given in the Xe x line table are taken from the specified source. Their meaning is stated below:

Symbol	Definition
b	blended line
m	masked line
?	listed as a tentative classification in reference
*	Two or more classifications of this line share the same intensity

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra,* (University of California Press, Berkeley, 1981).

83KAU V. Kaufman, J. Sugar, and J. L. Tech, J. Opt. Soc. Am. **73**, 691 (1983).

02CHU S. S. Churilov and Y. N. Yoshi, Phys. Scr. **65**, 40 (2002).

Energy levels of Xe x

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$4d^9$	^{2}D	5/2	02CHU
16 725.	0	$4d^9$	^{2}D	3/2	02CHU
629 040.	1	$4d^8 5p$	629 040°	7/2	02CHU
644 130.	1	$4d^8 5p$	644 130°	3/2	02CHU
646 494.	1	$4d^8 5p$	646 494°	5/2	02CHU
646 880.	1	$4d^8 5p$	646 880°	7/2	02CHU
654 245.	1	$4d^8 5p$	654 245°	3/2	02CHU
656 520.	1	$4d^8 5p$	656 520°	1/2	02CHU
657 645.	1	$4d^8 5p$	657 645°	5/2	02CHU
658 993.	1	$4d^8 5p$	658 993°	7/2	02CHU
662 160.	1	$4d^8 5p$	662 160°	3/2	02CHU
664 256.	1	$4d^8 5p$	664 256°	5/2	02CHU
668 525.	1	$4d^8 5p$	668 525°	5/2	02CHU
669 531.	1	$4d^8 5p$	669 531°	7/2	02CHU
671 045.	1	$4d^8 5p$	671 045°	5/2	02CHU
672 762.?	1	$4d^8 5p$	672 762°	7/2	02CHU
674 159.	1	$4d^8 5p$	674 159°	3/2	02CHU
675 652.	1	$4d^8 5p$	675 652°	5/2	02CHU
675 878.	1	$4d^8 5p$	675 878°	7/2	02CHU
677 421.	1	$4d^8 5p$	677 421°	3/2	02CHU
677 704.	1	$4d^8 5p$	677 704°	1/2	02CHU
681 425.	1	$4d^8 5p$	681 425°	1/2	02CHU
682 838.	1	$4d^8 5p$	682 838°	5/2	02CHU
682 998.	1	$4d^8 5p$	682 998°	3/2	02CHU
684 240.	1	$4d^8 5p$	684 240°	7/2	02CHU
688 121.	1	$4d^8 5p$	688 121°	3/2	02CHU
690 757.	1	$4d^8 5p$	690 757°	5/2	02CHU
691 306.	1	$4d^8 5p$	691 306°	3/2	02CHU
694 056.	1	$4d^8 5p$	694 056°	5/2	02CHU
695 239.	1	$4d^8 5p$	695 239°	1/2	02CHU
696 975.	1	$4d^8 5p$	696 975°	3/2	02CHU
701 735.	1	$4d^8 5p$	701 735°	5/2	02CHU
703 997.	1	$4d^8 5p$	703 997°	7/2	02CHU
705 669.	1	$4d^8 5p$	705 669°	1/2	02CHU
723 216.	1	$4d^8 5p$	723 216°	1/2	02CHU
745 212.	1	$4d^8 5p$	745 212°	3/2	02CHU
629 234.	1	$4p^5 4d^{10}$	629 234°	3/2	02CHU
924 721.	1	$4p^5 4d^{10}$	924 721°	1/2	02CHU
676 893.	1	$4d^8 4f$	676 893°	7/2	02CHU
678 351.	1	$4d^8 4f$	678 351°	5/2	02CHU
682 437.	1	$4d^8 4f$	682 437°	3/2	02CHU
684 807.	1	$4d^8 4f$	684 807°	1/2	02CHU
686 273.	1	$4d^8 4f$	686 273°	5/2	02CHU
687 770.	1	$4d^8 4f$	687 770°	7/2	02CHU
689 190.	1	$4d^8 4f$	689 190°	3/2	02CHU
697 440.	1	$4d^8 4f$	697 440°	3/2	02CHU
698 751.	1	$4d^8 4f$	698 751°	5/2	02CHU
701 155.	1	$4d^8 4f$	701 155°	5/2	02CHU
702 652.	1	$4d^8 4f$	702 652°	1/2	02CHU
708 748.	1	$4d^8 4f$	708 748°	7/2	02CHU
711 392.	1	$4d^8 4f$	711 392°	5/2	02CHU
713 643.	1	$4d^8 4f$	713 643°	5/2	02CHU
721 870.	1	$4d^8 4f$	721 870°	5/2	02CHU
725 785.	1	$4d^8 4f$	725 785°	1/2	02CHU
737 104.	1	$4d^8 4f$	737 104°	1/2	02CHU
749 681.	1	$4d^8 4f$	749 681°	3/2	02CHU
753 489.	1	$4d^8 4f$	753 489°	1/2	02CHU
864 592.	1	$4d^8 4f$	864 592°	5/2	02CHU
870 470.	1	$4d^8 4f$	870 470°	7/2	02CHU
874 794.	1	$4d^8 4f$	874 794°	3/2	02CHU
881 539.	1	$4d^8 4f$	881 539°	3/2	02CHU
887 203.	1	$4d^8 4f$	887 203°	5/2	02CHU

Spectral lines of Xe x

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
110.133	907.99	15	$4d^9$	^{2}D	3/2	–	$4p^5 4d^{10}$	924 721°	1/2	0.003	02CHU
112.714	887.20	3	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	887 203°	5/2	0.003	02CHU
113.438	881.54	15	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	881 539°	3/2	0.003	02CHU
114.312	874.80	30	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	874 794°	3/2	0.003	02CHU
114.880	870.47	80*	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	887 203°	5/2	0.003	02CHU
114.880	870.47	80*	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	870 470°	7/2	0.003	02CHU
115.632	864.81	30	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	881 539°	3/2	0.003	02CHU
115.661	864.60	60	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	864 592°	5/2	0.003	02CHU
116.541	858.07	12	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	874 794°	3/2	0.003	02CHU
133.390	749.681	7	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	749 681°	3/2	0.003	02CHU
134.189	745.218	6	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	745 212°	3/2	0.003	02CHU
135.729	736.762	10	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	753 489°	1/2	0.003	02CHU
137.272	728.481	10	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	745 212°	3/2	0.003	02CHU
138.529	721.871	3	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	721 870°	5/2	0.003	02CHU
138.816	720.378	7	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	737 104°	1/2	0.003	02CHU
140.126	713.643	4	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	713 643°	5/2	0.003	02CHU
141.032	709.059	5	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	725 785°	1/2	0.003	02CHU
141.094	708.747	9	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	708 748°	7/2	0.003	02CHU
141.545	706.489	6	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	723 216°	1/2	0.003	02CHU
142.046	703.997	25	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	703 997°	7/2	0.003	02CHU
142.502	701.745	3	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	701 735°	5/2	0.003	02CHU
143.381	697.442	8	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	697 440°	3/2	0.003	02CHU
143.478	696.971	10m	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	696 975°	3/2	0.003	02CHU
143.488	696.922	7m	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	713 643°	5/2	0.003	02CHU
143.954	694.666	2	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	711 392°	5/2	0.003	02CHU
144.079	694.064	2	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	694 056°	5/2	0.003	02CHU
144.655	691.300	20	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	691 306°	3/2	0.003	02CHU
144.771	690.746	7	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	690 757°	5/2	0.003	02CHU
145.096	689.199	5	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	689 190°	3/2	0.003	02CHU
145.150	688.942	35	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	705 669°	1/2	0.003	02CHU
145.325	688.113	25	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	688 121°	3/2	0.003	02CHU
145.397	687.772	4	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	687 770°	7/2	0.003	02CHU
145.715	686.271	4	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	686 273°	5/2	0.003	02CHU
145.788	685.928	3	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	702 652°	1/2	0.003	02CHU
145.983	685.011	55	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	701 735°	5/2	0.003	02CHU
146.107	684.430	17	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	701 155°	5/2	0.003	02CHU
146.148	684.238	8	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	684 240°	7/2	0.003	02CHU
146.413	682.999	15	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	682 998°	3/2	0.003	02CHU
146.448	682.836	5	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	682 838°	5/2	0.003	02CHU
146.532	682.445	4	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	682 437°	3/2	0.003	02CHU
146.622	682.026	5	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	698 751°	5/2	0.003	02CHU
147.005	680.249	2	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	696 975°	3/2	0.003	02CHU
147.381	678.514	8	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	695 239°	1/2	0.003	02CHU
147.418	678.343	6	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	678 351°	5/2	0.003	02CHU
147.618	677.424	72	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	677 421°	3/2	0.003	02CHU
147.640	677.323	34	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	694 056°	5/2	0.003	02CHU
147.734	676.892	6	$4d^9$	^{2}D	5/2	–	$4d^8 4f$	676 893°	7/2	0.003	02CHU
147.956	675.877	100	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	675 878°	7/2	0.003	02CHU
148.238	674.591	10	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	691 306°	3/2	0.003	02CHU
148.333	674.159	30	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	674 159°	3/2	0.003	02CHU
148.359	674.041	52	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	690 757°	5/2	0.003	02CHU
148.641	672.762	6?	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	672 762°	7/2	0.003	02CHU
148.709	672.454	23	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	689 190°	3/2	0.003	02CHU
148.942	671.402	44	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	688 121°	3/2	0.003	02CHU
149.020	671.051	75	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	671 045°	5/2	0.003	02CHU
149.358	669.532	80	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	669 531°	7/2	0.003	02CHU
149.583	668.525	42	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	668 525°	5/2	0.003	02CHU
149.682	668.083	4	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	684 807°	1/2	0.003	02CHU
150.089	666.271	150b	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	682 998°	3/2	0.003	02CHU
150.124	666.116	95b	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	682 838°	5/2	0.003	02CHU
150.216	665.708	5	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	682 437°	3/2	0.003	02CHU
150.444	664.699	9	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	681 425°	1/2	0.003	02CHU

Spectral lines of Xe x—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
150.544	664.258	90	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	664 256°	5/2	0.003	02CHU
151.020	662.164	10	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	662 160°	3/2	0.003	02CHU
151.141	661.634	9	$4d^9$	^{2}D	3/2	–	$4d^8 4f$	678 351°	5/2	0.003	02CHU
151.291	660.978	6	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	677 704°	1/2	0.003	02CHU
151.356	660.694	4	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	677 421°	3/2	0.003	02CHU
151.747	658.992	80	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	658 993°	7/2	0.003	02CHU
151.762	658.926	27	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	675 652°	5/2	0.003	02CHU
152.058	657.644	78	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	657 645°	5/2	0.003	02CHU
152.832	654.313	6	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	671 045°	5/2	0.003	02CHU
152.849	654.240	5	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	654 245°	3/2	0.003	02CHU
154.433	647.530	6	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	664 256°	5/2	0.003	02CHU
154.588	646.881	8	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	646 880°	7/2	0.003	02CHU
154.680	646.496	24	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	646 494°	5/2	0.003	02CHU
154.935	645.432	15	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	662 160°	3/2	0.003	02CHU
155.248	644.131	4	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	644 130°	3/2	0.003	02CHU
156.300	639.795	3	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	656 520°	1/2	0.003	02CHU
156.857	637.523	5	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	654 245°	3/2	0.003	02CHU
158.924	629.232	7	$4d^9$	^{2}D	5/2	–	$4p^5 4d^{10}$	629 234°	3/2	0.003	02CHU
158.972	629.042	3	$4d^9$	^{2}D	5/2	–	$4d^8 5p$	629 040°	7/2	0.003	02CHU
159.388	627.400	10 m	$4d^9$	^{2}D	3/2	–	$4d^8 5p$	644 130°	3/2	0.003	02CHU
163.262	612.512	3	$4d^9$	^{2}D	3/2	–	$4p^5 4d^{10}$	629 234°	3/2	0.003	02CHU

4.11. Xe XI

Ru isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^8\ ^3F_4$

Ionization energy 1 847 200±1600 cm^{-1} (229.02±0.20 eV) [03CHU$_b$]

A partial analysis of the spectrum of ten times ionized xenon, Xe XI was carried out by Churilov *et al.* [03CHU$_a$], [03CHU$_b$]. They studied the transitions between the $4p^6 4d^8$ ground configuration and the $4p^6 4d^7 5p$, $4p^6 4d^7 4f$, and $4p^5 4d^9$ excited levels. We tabulate the 132 levels they determined in the Xe XI level table. The levels of the ground configuration have an estimated uncertainty of 10 cm^{-1}. The excited configuration levels have estimated uncertainties of 20–30 cm^{-1}. The levels of the excited configurations are very mixed in their term designations (and for several levels also in their configurations) so we do not specify a LS designation but assign them by specifying only the configuration, the integer value of the energy level, the J value, and their odd parity. See Churilov *et al.* [03CHU$_b$] for the leading LS terms of each level. A "?" after a level indicates that the level is tentative.

Churilov *et al.* [03CHU$_a$] classified 16 prominent Xe XI lines and Churilov *et al.* [03CHU$_b$] classified 201 Xe XI lines. They used a low inductance triggered spark initiated by a puff of xenon gas as their source. The uncertainty of their wavelength measurements is 0.003 Å. The lines listed in the Xe XI line table are taken from [03CHU$_b$].

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XI levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] are used by Churilov *et al.* [03CHU$_b$] to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in Churilov *et al.* [03CHU$_b$].

The intensity codes given in the Xe XI line table are taken from the specified source. Their meaning is stated below:

Symbol	Definition
bl	blended line
m	masked line
?	listed as a tentative classification in reference
*	two or more classifications of this line share the same intensity

The ionization energy was determined by Churilov *et al.* [03CHU$_b$] by means of semiempirical calculations.

References

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

03CHU$_a$ S. S. Churilov, Y. N. Yoshi, and J. Reader, Opt. Lett. **28**, 1478 (2003).

03CHU$_b$ S. S. Churilov, Y. N. Yoshi, J. Reader, and R. R. Kildiyarova, "Analysis of the $4p^6 4d^8 - (4d^7 5p + 4d^7 4f + 4p^5 4d^9)$ Transitions in Xe XI Ion." Phys. Scr. (to be published).

Energy levels of Xe XI

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$4p^6 4d^8$	^3F	4	03CHU$_b$
13 140.	0	$4p^6 4d^8$	^3F	2	03CHU$_b$
15 205.	0	$4p^6 4d^8$	^3F	3	03CHU$_b$
26 670.	0	$4p^6 4d^8$	^3P	2	03CHU$_b$
32 210.	0	$4p^6 4d^8$	^3P	0	03CHU$_b$
34 610.	0	$4p^6 4d^8$	^3P	1	03CHU$_b$
40 835.	0	$4p^6 4d^8$	^1G	4	03CHU$_b$
42 900.	0	$4p^6 4d^8$	^1D	2	03CHU$_b$
88 130.	0	$4p^6 4d^8$	^1S	0	03CHU$_b$
679 572?	1	$4p^5 4d^9$	679 572°	3	03CHU$_b$
681 023?	1	$4p^5 4d^9$	681 023°	2	03CHU$_b$
687 020?	1	$4p^5 4d^9$	687 020°	4	03CHU$_b$
717 330?	1	$4p^5 4d^9$	717 330°	3	03CHU$_b$
944 705	1	$4p^5 4d^9$	944 705°	2	03CHU$_b$
951 795	1	$4p^5 4d^9$	951 795°	2	03CHU$_b$
957 488	1	$4p^5 4d^9$	957 488°	3	03CHU$_b$
695 376?	1	$4p^6 4d^7 5p$	695 376°	4	03CHU$_b$
709 285?	1	$4p^6 4d^7 5p$	709 285°	3	03CHU$_b$
712 223	1	$4p^6 4d^7 5p$	712 223°	4	03CHU$_b$
714 855	1	$4p^6 4d^7 5p$	714 855°	3	03CHU$_b$
715 730	1	$4p^6 4d^7 5p$	715 730°	2	03CHU$_b$
721 001?	1	$4p^6 4d^7 5p$	721 001°	2	03CHU$_b$
722 439	1	$4p^6 4d^7 5p$	722 439°	5	03CHU$_b$
725 053	1	$4p^6 4d^7 5p$	725 053°	4	03CHU$_b$
725 825	1	$4p^6 4d^7 5p$	725 825°	3	03CHU$_b$
730 345	1	$4p^6 4d^7 5p$	730 345°	5	03CHU$_b$
731 458	1	$4p^6 4d^7 5p$	731 458°	4	03CHU$_b$
733 755	1	$4p^6 4d^7 5p$	733 755°	3	03CHU$_b$
737 388	1	$4p^6 4d^7 5p$	737 388°	4	03CHU$_b$
738 248	1	$4p^6 4d^7 5p$	738 248°	5	03CHU$_b$
739 322	1	$4p^6 4d^7 5p$	739 322°	3	03CHU$_b$
739 542	1	$4p^6 4d^7 5p$	739 542°	4	03CHU$_b$
740 348	1	$4p^6 4d^7 5p$	740 348°	5	03CHU$_b$
740 757	1	$4p^6 4d^7 5p$	740 757°	2	03CHU$_b$
741 800	1	$4p^6 4d^7 5p$	741 800°	3	03CHU$_b$
742 594	1	$4p^6 4d^7 5p$	742 594°	1	03CHU$_b$
744 537	1	$4p^6 4d^7 5p$	744 537°	4	03CHU$_b$
744 955	1	$4p^6 4d^7 5p$	744 955°	3	03CHU$_b$
745 470	1	$4p^6 4d^7 5p$	745 470°	1	03CHU$_b$
746 445	1	$4p^6 4d^7 5p$	746 445°	3	03CHU$_b$
746 552	1	$4p^6 4d^7 5p$	746 552°	2	03CHU$_b$
749 351	1	$4p^6 4d^7 5p$	749 351°	3	03CHU$_b$
750 512	1	$4p^6 4d^7 5p$	750 512°	2	03CHU$_b$
752 054	1	$4p^6 4d^7 5p$	752 054°	3	03CHU$_b$
752 155	1	$4p^6 4d^7 5p$	752 155°	1	03CHU$_b$
752 285	1	$4p^6 4d^7 5p$	752 285°	4	03CHU$_b$
753 352	1	$4p^6 4d^7 5p$	753 352°	5	03CHU$_b$
753 795	1	$4p^6 4d^7 5p$	753 795°	2	03CHU$_b$
754 745	1	$4p^6 4d^7 5p$	754 745°	1	03CHU$_b$
754 860	1	$4p^6 4d^7 5p$	754 860°	3	03CHU$_b$
755 831	1	$4p^6 4d^7 5p$	755 831°	4	03CHU$_b$
756 016	1	$4p^6 4d^7 5p$	756 016°	4	03CHU$_b$
756 170	1	$4p^6 4d^7 5p$	756 170°	2	03CHU$_b$
758 337	1	$4p^6 4d^7 5p$	758 337°	1	03CHU$_b$
759 110	1	$4p^6 4d^7 5p$	759 110°	3	03CHU$_b$
759 260	1	$4p^6 4d^7 5p$	759 260°	5	03CHU$_b$
760 950	1	$4p^6 4d^7 5p$	760 950°	1	03CHU$_b$
761 266	1	$4p^6 4d^7 5p$	761 266°	3	03CHU$_b$
762 105	1	$4p^6 4d^7 5p$	762 105°	2	03CHU$_b$
763 070	1	$4p^6 4d^7 5p$	763 070°	4	03CHU$_b$
765 052	1	$4p^6 4d^7 5p$	765 052°	2	03CHU$_b$

Energy levels of Xe XI—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
765 770	1	$4p^6 4d^7 5p$	765 770°	1	$03CHU_b$
766 625	1	$4p^6 4d^7 5p$	766 625°	2	$03CHU_b$
766 860	1	$4p^6 4d^7 5p$	766 860°	3	$03CHU_b$
766 947	1	$4p^6 4d^7 5p$	766 947°	5	$03CHU_b$
767 369	1	$4p^6 4d^7 5p$	767 369°	1	$03CHU_b$
767 700	1	$4p^6 4d^7 5p$	767 700°	5	$03CHU_b$
768 773	1	$4p^6 4d^7 5p$	768 773°	3	$03CHU_b$
773 315	1	$4p^6 4d^7 5p$	773 315°	2	$03CHU_b$
773 715	1	$4p^6 4d^7 5p$	773 715°	3	$03CHU_b$
773 968	1	$4p^6 4d^7 5p$	773 968°	4	$03CHU_b$
773 968	1	$4p^6 4d^7 5p$	773 968°	5	$03CHU_b$
775 030	1	$4p^6 4d^7 5p$	775 030°	1	$03CHU_b$
775 570	1	$4p^6 4d^7 5p$	775 570°	3	$03CHU_b$
775 775	1	$4p^6 4d^7 5p$	775 775°	4	$03CHU_b$
778 350	1	$4p^6 4d^7 5p$	778 350°	1	$03CHU_b$
780 503	1	$4p^6 4d^7 5p$	780 503°	3	$03CHU_b$
781 822	1	$4p^6 4d^7 5p$	781 822°	2	$03CHU_b$
784 035	1	$4p^6 4d^7 5p$	784 035°	1	$03CHU_b$
786 580	1	$4p^6 4d^7 5p$	786 580°	2	$03CHU_b$
788 145	1	$4p^6 4d^7 5p$	788 145°	2	$03CHU_b$
788 396	1	$4p^6 4d^7 5p$	788 396°	1	$03CHU_b$
788 465	1	$4p^6 4d^7 5p$	788 465°	3	$03CHU_b$
789 029	1	$4p^6 4d^7 5p$	789 029°	5	$03CHU_b$
791 805	1	$4p^6 4d^7 5p$	791 805°	1	$03CHU_b$
792 311	1	$4p^6 4d^7 5p$	792 311°	0	$03CHU_b$
795 135	1	$4p^6 4d^7 5p$	795 135°	3	$03CHU_b$
795 995	1	$4p^6 4d^7 5p$	795 995°	2	$03CHU_b$
801 225	1	$4p^6 4d^7 5p$	801 225°	3	$03CHU_b$
802 905	1	$4p^6 4d^7 5p$	802 905°	2	$03CHU_b$
808 130	1	$4p^6 4d^7 5p$	808 130°	1	$03CHU_b$
824 474	1	$4p^6 4d^7 5p$	824 474°	3	$03CHU_b$
828 875	1	$4p^6 4d^7 5p$	828 875°	2	$03CHU_b$
830 260	1	$4p^6 4d^7 5p$	830 260°	1	$03CHU_b$
838 289	1	$4p^6 4d^7 5p$	838 289°	3	$03CHU_b$
730 235?	1	$4p^6 4d^7 4f$	730 235°	4	$03CHU_b$
735 246	1	$4p^6 4d^7 4f$	735 246°	4	$03CHU_b$
736 077?	1	$4p^6 4d^7 4f$	736 077°	5	$03CHU_b$
742 430	1	$4p^6 4d^7 4f$	742 430°	5	$03CHU_b$
745 762	1	$4p^6 4d^7 4f$	745 762°	3	$03CHU_b$
748 644?	1	$4p^6 4d^7 4f$	748 644°	1	$03CHU_b$
769 217	1	$4p^6 4d^7 4f$	769 217°	2	$03CHU_b$
772 875	1	$4p^6 4d^7 4f$	772 875°	4	$03CHU_b$
773 363	1	$4p^6 4d^7 4f$	773 363°	4	$03CHU_b$
773 519	1	$4p^6 4d^7 4f$	773 519°	5	$03CHU_b$
776 253	1	$4p^6 4d^7 4f$	776 253°	3	$03CHU_b$
776 787	1	$4p^6 4d^7 4f$	776 787°	4	$03CHU_b$
780 805	1	$4p^6 4d^7 4f$	780 805°	2	$03CHU_b$
784 826	1	$4p^6 4d^7 4f$	784 826°	3	$03CHU_b$
787 403	1	$4p^6 4d^7 4f$	787 403°	1	$03CHU_b$
791 395	1	$4p^6 4d^7 4f$	791 395°	3	$03CHU_b$
794 365	1	$4p^6 4d^7 4f$	794 365°	2	$03CHU_b$
892 420	1	$4p^6 4d^7 4f$	892 420°	4	$03CHU_b$
894 941	1	$4p^6 4d^7 4f$	894 941°	3	$03CHU_b$
897 383	1	$4p^6 4d^7 4f$	897 383°	5	$03CHU_b$
902 577	1	$4p^6 4d^7 4f$	902 577°	1	$03CHU_b$
907 711	1	$4p^6 4d^7 4f$	907 711°	2	$03CHU_b$
908 390	1	$4p^6 4d^7 4f$	908 390°	3	$03CHU_b$
911 082	1	$4p^6 4d^7 4f$	911 082°	4	$03CHU_b$
911 665	1	$4p^6 4d^7 4f$	911 665°	2	$03CHU_b$
912 600	1	$4p^6 4d^7 4f$	912 600°	3	$03CHU_b$
913 877	1	$4p^6 4d^7 4f$	913 877°	1	$03CHU_b$
922 295	1	$4p^6 4d^7 4f$	922 295°	3	$03CHU_b$

Energy levels of Xe XI—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
924 500	1	$4p^6 4d^7 4f$	924 500°	2	$03CHU_b$
925 010	1	$4p^6 4d^7 4f$	925 010°	1	$03CHU_b$
925 626	1	$4p^6 4d^7 4f$	925 626°	4	$03CHU_b$
931 420	1	$4p^6 4d^7 4f$	931 420°	1	$03CHU_b$
933 343	1	$4p^6 4d^7 4f$	933 343°	0	$03CHU_b$
935 035	1	$4p^6 4d^7 4f$	935 035°	3	$03CHU_b$
938 628	1	$4p^6 4d^7 4f$	938 628°	5	$03CHU_b$
947 660	1	$4p^6 4d^7 4f$	947 660°	1	$03CHU_b$
989 020	1	$4p^6 4d^7 4f$	989 020°	1	$03CHU_b$

Spectral lines of Xe XI

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
105.699	946.08	14	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 4f$	989 020°	1	0.003	$03CHU_b$
106.125	942.29	52	$4p^6 4d^8$	^{3}F	3	–	$4p^5 4d^9$	957 488°	3	0.003	$03CHU_b$
109.027	917.20	276	$4p^6 4d^8$	^{3}P	1	–	$4p^5 4d^9$	951 795°	2	0.003	$03CHU_b$
109.093	916.65	314	$4p^6 4d^8$	^{1}G	4	–	$4p^5 4d^9$	957 488°	3	0.003	$03CHU_b$
109.339	914.59	217	$4p^6 4d^8$	^{1}D	2	–	$4p^5 4d^9$	957 488°	3	0.003	$03CHU_b$
109.878	910.10	286	$4p^6 4d^8$	^{3}P	1	–	$4p^5 4d^9$	944 705°	2	0.003	$03CHU_b$
110.026	908.88	121	$4p^6 4d^8$	^{1}D	2	–	$4p^5 4d^9$	951 795°	2	0.003	$03CHU_b$
110.531	904.72	263*	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 4f$	947 660°	1	0.003	$03CHU_b$
110.531	904.72	263*	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 4f$	931 420°	1	0.003	$03CHU_b$
110.889	901.80	107	$4p^6 4d^8$	^{1}D	2	–	$4p^5 4d^9$	944 705°	2	0.003	$03CHU_b$
110.998	900.92	140	$4p^6 4d^8$	^{1}S	0	–	$4p^6 4d^7 4f$	989 020°	1	0.003	$03CHU_b$
111.174	899.49	176	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 4f$	912 600°	3	0.003	$03CHU_b$
111.268	898.73	148	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	933 343°	0	0.003	$03CHU_b$
111.290	898.55	164	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 4f$	911 665°	2	0.003	$03CHU_b$
111.384	897.80	635*	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 4f$	924 500°	2	0.003	$03CHU_b$
111.384	897.80	635*	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	938 628°	5	0.003	$03CHU_b$
111.435	897.38	559*	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	912 600°	3	0.003	$03CHU_b$
111.435	897.38	559*	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	897 383°	5	0.003	$03CHU_b$
111.504	896.83	148	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	931 420°	1	0.003	$03CHU_b$
111.552	896.44	169	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	911 665°	2	0.003	$03CHU_b$
111.622	895.88	577	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	911 082°	4	0.003	$03CHU_b$
111.654	895.62	447	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 4f$	922 295°	3	0.003	$03CHU_b$
111.706	895.21	534	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 4f$	908 390°	3	0.003	$03CHU_b$
111.739	894.94	467	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	894 941°	3	0.003	$03CHU_b$
111.785	894.57	387	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 4f$	907 711°	2	0.003	$03CHU_b$
111.834	894.18	85	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	935 035°	3	0.003	$03CHU_b$
111.954	893.22	161	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	908 390°	3	0.003	$03CHU_b$
112.006	892.81	192	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 4f$	925 010°	1	0.003	$03CHU_b$
112.045	892.50	200m	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	907 711°	2	0.003	$03CHU_b$
112.055	892.42	626	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	892 420°	4	0.003	$03CHU_b$
112.089	892.15	388	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 4f$	935 035°	3	0.003	$03CHU_b$
112.373	889.89	56	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	924 500°	2	0.003	$03CHU_b$
112.431	889.43	139	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 4f$	902 577°	1	0.003	$03CHU_b$
112.713	887.21	143bl	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 4f$	913 877°	1	0.003	$03CHU_b$
112.877	885.92	52	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 4f$	912 600°	3	0.003	$03CHU_b$
113.021	884.79	420	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	925 626°	4	0.003	$03CHU_b$
113.366	882.10	35	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 4f$	925 010°	1	0.003	$03CHU_b$
113.731	879.27	74	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	913 877°	1	0.003	$03CHU_b$
114.020	877.04	131	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	911 665°	2	0.003	$03CHU_b$
114.713	871.74	37	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	912 600°	3	0.003	$03CHU_b$
116.342	859.53	60	$4p^6 4d^8$	^{1}S	0	–	$4p^6 4d^7 4f$	947 660°	1	0.003	$03CHU_b$
119.291	838.29	20	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	838 289°	3	0.003	$03CHU_b$
122.902	813.656	41	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	828 875°	2	0.003	$03CHU_b$
126.360	791.390	11	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	791 395°	3	0.003	$03CHU_b$
127.006	787.364	6	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	830 260°	1	0.003	$03CHU_b$
127.227	785.997	12	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	828 875°	2	0.003	$03CHU_b$

Spectral lines of Xe XI—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
127.610	783.638	26	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	824 474°	3	0.003	03CHU$_b$
127.967	781.451	9	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	808 130°	1	0.003	03CHU$_b$
128.080	780.762	5	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	795 995°	2	0.003	03CHU$_b$
128.219	779.916	17	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	795 135°	3	0.003	03CHU$_b$
128.344	779.156	9	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	794 365°	2	0.003	03CHU$_b$
128.834	776.193	17	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	791 395°	3	0.003	03CHU$_b$
129.640	771.367	8	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	786 580°	2	0.003	03CHU$_b$
129.934	769.622	18	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	784 826°	3	0.003	03CHU$_b$
129.987	769.308	30	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	795 995°	2	0.003	03CHU$_b$
130.079	768.764	27	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	768 773°	3	0.003	03CHU$_b$
130.163	768.267	27	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	802 905°	2	0.003	03CHU$_b$
130.262	767.684	15	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	767 700°	5	0.003	03CHU$_b$
130.442	766.624	15	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	781 822°	2	0.003	03CHU$_b$
130.679	765.234	23	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	778 350°	1	0.003	03CHU$_b$
131.055	763.038	27	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	763 070°	4	0.003	03CHU$_b$
131.160	762.428	12	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	775 570°	3	0.003	03CHU$_b$
131.281	761.725	12	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	788 396°	1	0.003	03CHU$_b$
131.321	761.493	11	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	788 145°	2	0.003	03CHU$_b$
131.398	761.047	14	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	776 253°	3	0.003	03CHU$_b$
131.481	760.566	8	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	775 775°	4	0.003	03CHU$_b$
131.515	760.370	156	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	801 225°	3	0.003	03CHU$_b$
131.573	760.034	14	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	802 905°	2	0.003	03CHU$_b$
131.620	759.763	17	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	794 365°	2	0.003	03CHU$_b$
131.648	759.601	12	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 5p$	791 805°	1	0.003	03CHU$_b$
131.711	759.238	57	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	759 260°	5	0.003	03CHU$_b$
131.733	759.111	102	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	759 110°	3	0.003	03CHU$_b$
131.865	758.351	27	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	801 225°	3	0.003	03CHU$_b$
131.905	758.121	12	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	773 315°	2	0.003	03CHU$_b$
131.978	757.702	20	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	792 311°	0	0.003	03CHU$_b$
132.067	757.191	5	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	791 805°	1	0.003	03CHU$_b$
132.305	755.829	84m	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	755 831°	4	0.003	03CHU$_b$
132.471	754.882	32	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	754 860°	3	0.003	03CHU$_b$
132.573	754.301	170	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	795 135°	3	0.003	03CHU$_b$
132.623	754.017	11	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 4f$	769 217°	2	0.003	03CHU$_b$
132.658	753.818	55	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	780 503°	3	0.003	03CHU$_b$
132.701	753.574	53	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	768 773°	3	0.003	03CHU$_b$
132.740	753.352	24	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	753 352°	5	0.003	03CHU$_b$
132.783	753.108	18	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	795 995°	2	0.003	03CHU$_b$
132.839	752.791	14	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 4f$	787 403°	1	0.003	03CHU$_b$
132.928	752.287	47	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	752 285°	4	0.003	03CHU$_b$
132.983	751.976	114	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	786 580°	2	0.003	03CHU$_b$
133.042	751.642	8*	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	778 350°	1	0.003	03CHU$_b$
133.042	751.642	8*	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	766 860°	3	0.003	03CHU$_b$
133.072	751.473	15	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 4f$	794 365°	2	0.003	03CHU$_b$
133.082	751.416	16m	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	766 625°	2	0.003	03CHU$_b$
133.361	749.844	63	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	765 052°	2	0.003	03CHU$_b$
133.437	749.417	23	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	784 035°	1	0.003	03CHU$_b$
133.513	748.991	23	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	762 105°	2	0.003	03CHU$_b$
133.529	748.901	52	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	791 805°	1	0.003	03CHU$_b$
133.655	748.195	323	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	789 029°	5	0.003	03CHU$_b$
133.710	747.887	15	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	763 070°	4	0.003	03CHU$_b$
133.760	747.608	8	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	788 465°	3	0.003	03CHU$_b$
133.861	747.044	9	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	773 715°	3	0.003	03CHU$_b$
133.891	746.876	14	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	762 105°	2	0.003	03CHU$_b$
133.934	746.636	50	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	773 315°	2	0.003	03CHU$_b$
133.968	746.447	29	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	746 445°	3	0.003	03CHU$_b$
134.037	746.063	309	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	761 266°	3	0.003	03CHU$_b$
134.091	745.762	156	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	745 762°	3	0.003	03CHU$_b$
134.124	745.579	84	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	788 465°	3	0.003	03CHU$_b$
134.187	745.229	24bl	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	788 145°	2	0.003	03CHU$_b$
134.238	744.946	138	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	744 955°	3	0.003	03CHU$_b$
134.312	744.535	89	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	744 537°	4	0.003	03CHU$_b$

Spectral lines of Xe XI—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
134.426	743.904	29	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	759 110°	3	0.003	03CHU$_b$
134.581	743.047	59	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	756 170°	2	0.003	03CHU$_b$
134.626	742.799	8	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 5p$	775 030°	1	0.003	03CHU$_b$
134.673	742.539	48	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 4f$	769 217°	2	0.003	03CHU$_b$
134.689	742.451	20	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	742 430°	5	0.003	03CHU$_b$
134.750	742.115	99	$4p^6 4d^8$	^{1}S	0	–	$4p^6 4d^7 5p$	830 260°	1	0.003	03CHU$_b$
134.844	741.598	89	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	754 745°	1	0.003	03CHU$_b$
134.927	741.142	218	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	784 035°	1	0.003	03CHU$_b$
134.962	740.949	222	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	756 170°	2	0.003	03CHU$_b$
134.987	740.812	392	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	756 016°	4	0.003	03CHU$_b$
135.072	740.346	518	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	740 348°	5	0.003	03CHU$_b$
135.100	740.192	179	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	766 860°	3	0.003	03CHU$_b$
135.145	739.946	63	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	766 625°	2	0.003	03CHU$_b$
135.202	739.634	53	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	754 860°	3	0.003	03CHU$_b$
135.219	739.541	135	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	739 542°	4	0.003	03CHU$_b$
135.259	739.322	60	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	739 322°	3	0.003	03CHU$_b$
135.298	739.109	123	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	765 770°	1	0.003	03CHU$_b$
135.317	739.005	95	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	752 155°	1	0.003	03CHU$_b$
135.334	738.913	165*	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	781 822°	2	0.003	03CHU$_b$
135.334	738.913	165*	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	752 054°	3	0.003	03CHU$_b$
135.393	738.591	66	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	753 795°	2	0.003	03CHU$_b$
135.431	738.383	14	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	765 052°	2	0.003	03CHU$_b$
135.456	738.247	11	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	738 248°	5	0.003	03CHU$_b$
135.519	737.904	60 m	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 4f$	780 805°	2	0.003	03CHU$_b$
135.571	737.621	80	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	780 503°	3	0.003	03CHU$_b$
135.614	737.387	339	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	737 388°	4	0.003	03CHU$_b$
135.855	736.079	18?	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	736 077°	5	0.003	03CHU$_b$
135.878	735.954	71	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	776 787°	4	0.003	03CHU$_b$
135.961	735.505	48?	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 4f$	748 644°	1	0.003	03CHU$_b$
135.997	735.310	38	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	750 512°	2	0.003	03CHU$_b$
136.009	735.245	50	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	735 246°	4	0.003	03CHU$_b$
136.025	735.159	33	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 5p$	767 369°	1	0.003	03CHU$_b$
136.065	734.943	50	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	775 775°	4	0.003	03CHU$_b$
136.188	734.279	54	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	760 950°	1	0.003	03CHU$_b$
136.213	734.144	336	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	749 351°	3	0.003	03CHU$_b$
136.290	733.730	63	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	733 755°	3	0.003	03CHU$_b$
136.324	733.547	35	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 5p$	765 770°	1	0.003	03CHU$_b$
136.348	733.417	122	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	746 552°	2	0.003	03CHU$_b$
136.401	733.132	236*	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	773 968°	4	0.003	03CHU$_b$
136.401	733.132	236*	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	773 968°	5	0.003	03CHU$_b$
136.451	732.864	75	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	773 715°	3	0.003	03CHU$_b$
136.484	732.687	23	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	773 519°	5	0.003	03CHU$_b$
136.514	732.526	143	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	773 363°	4	0.003	03CHU$_b$
136.547	732.349	65	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	745 470°	1	0.003	03CHU$_b$
136.584	732.150	48	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	775 030°	1	0.003	03CHU$_b$
136.605	732.038	315*	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	772 875°	4	0.003	03CHU$_b$
136.605	732.038	315*	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	766 625°	2	0.003	03CHU$_b$
136.670	731.689	18	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	758 337°	1	0.003	03CHU$_b$
136.713	731.459	127	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	731 458°	4	0.003	03CHU$_b$
136.735	731.342	21	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	746 552°	2	0.003	03CHU$_b$
136.829	730.839	21	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	773 715°	3	0.003	03CHU$_b$
136.908	730.418	11	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	773 315°	2	0.003	03CHU$_b$
136.922	730.343	29	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	730 345°	5	0.003	03CHU$_b$
136.942	730.236	15?	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 4f$	730 235°	4	0.003	03CHU$_b$
137.031	729.762	21	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	744 955°	3	0.003	03CHU$_b$
137.238	728.661	98	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	741 800°	3	0.003	03CHU$_b$
137.438	727.601	15	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	740 757°	2	0.003	03CHU$_b$
137.524	727.146	8	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	753 795°	2	0.003	03CHU$_b$
137.574	726.882	12	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	767 700°	5	0.003	03CHU$_b$
137.677	726.338	65	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	760 950°	1	0.003	03CHU$_b$
137.720	726.111	35	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	766 947°	5	0.003	03CHU$_b$
137.778	725.805	60	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	725 825°	3	0.003	03CHU$_b$

Spectral lines of Xe XI—Continued

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
137.921	725.053	27	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	725 053°	4	0.003	03CHU$_b$
138.152	723.840	30	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	750 512°	2	0.003	03CHU$_b$
138.178	723.704	16	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	758 337°	1	0.003	03CHU$_b$
138.420	722.439	20	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	722 439°	5	0.003	03CHU$_b$
138.459	722.235	159	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	763 070°	4	0.003	03CHU$_b$
138.765	720.643	29	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	733 755°	3	0.003	03CHU$_b$
138.889	719.999	21	$4p^6 4d^8$	^{1}S	0	–	$4p^6 4d^7 5p$	808 130°	1	0.003	03CHU$_b$
138.896	719.963	23	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 5p$	752 155°	1	0.003	03CHU$_b$
139.050	719.166	59	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	753 795°	2	0.003	03CHU$_b$
139.166	718.566	33	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	733 755°	3	0.003	03CHU$_b$
139.190	718.442	102	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	759 260°	5	0.003	03CHU$_b$
139.689	715.876	21	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	750 512°	2	0.003	03CHU$_b$
139.825	715.180	39	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	756 016°	4	0.003	03CHU$_b$
139.836	715.123	30	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	741 800°	3	0.003	03CHU$_b$
139.893	714.832	15	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	714 855°	3	0.003	03CHU$_b$
140.036	714.102	21	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	740 757°	2	0.003	03CHU$_b$
140.207	713.231	16	$4p^6 4d^8$	^{3}P	0	–	$4p^6 4d^7 5p$	745 470°	1	0.003	03CHU$_b$
140.314	712.687	10	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	725 825°	3	0.003	03CHU$_b$
140.347	712.520	16	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 5p$	753 352°	5	0.003	03CHU$_b$
140.405	712.225	29	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	712 223°	4	0.003	03CHU$_b$
140.478	711.855	5	$4p^6 4d^8$	^{1}D	2	–	$4p^6 4d^7 5p$	754 745°	1	0.003	03CHU$_b$
140.723	710.616	9	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	725 825°	3	0.003	03CHU$_b$
140.987	709.285	6?	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	709 285°	3	0.003	03CHU$_b$
141.246	707.985	16	$4p^6 4d^8$	^{3}P	1	–	$4p^6 4d^7 5p$	742 594°	1	0.003	03CHU$_b$
141.271	707.859	11?	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	721 001°	2	0.003	03CHU$_b$
141.428	707.074	15	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	733 755°	3	0.003	03CHU$_b$
142.112	703.670	6	$4p^6 4d^8$	^{1}S	0	–	$4p^6 4d^7 5p$	791 805°	1	0.003	03CHU$_b$
142.328	702.602	5	$4p^6 4d^8$	^{3}F	2	–	$4p^6 4d^7 5p$	715 730°	2	0.003	03CHU$_b$
142.539	701.562	6	$4p^6 4d^8$	^{1}G	4	–	$4p^6 4d^7 4f$	742 430°	5	0.003	03CHU$_b$
142.753	700.511	8	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	715 730°	2	0.003	03CHU$_b$
142.925	699.668	14	$4p^6 4d^8$	^{3}F	3	–	$4p^6 4d^7 5p$	714 855°	3	0.003	03CHU$_b$
143.026	699.174	15	$4p^6 4d^8$	^{3}P	2	–	$4p^6 4d^7 5p$	725 825°	3	0.003	03CHU$_b$
143.807	695.376	21?	$4p^6 4d^8$	^{3}F	4	–	$4p^6 4d^7 5p$	695 376°	4	0.003	03CHU$_b$
145.556	687.021	8?	$4p^6 4d^8$	^{3}F	4	–	$4p^5 4d^9$	687 020°	4	0.003	03CHU$_b$
147.149	679.583	11?	$4p^6 4d^8$	^{3}F	4	–	$4p^5 4d^9$	679 572°	3	0.003	03CHU$_b$
147.821	676.494	8?	$4p^6 4d^8$	^{1}G	4	–	$4p^5 4d^9$	717 330°	3	0.003	03CHU$_b$
149.727	667.882	18?	$4p^6 4d^8$	^{3}F	2	–	$4p^5 4d^9$	681 023°	2	0.003	03CHU$_b$
156.562	638.725	8?	$4p^6 4d^8$	^{1}G	4	–	$4p^5 4d^9$	679 572°	3	0.003	03CHU$_b$

4.12. Xe XII

Tc isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^7\ ^4F_{9/2}$

Ionization energy 2 125 000 cm^{-1} (263.5 eV) [70CAR]

The ground state of Xe XII was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. Klosner and Silfvast [00KLO] have identified emission around 110 Å from a capillary-discharge plasma as being from Xe XII. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

4.13. Xe XIII

Mo isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^6\ ^5D_4$

Ionization energy 2 374 000 cm^{-1} (294.4 eV) [70CAR]

The ground state of Xe XIII was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

00KLO M. A. Klosner and W. T. Silfvast, J. Opt. Soc. Am. B **17**, 1279 (2000).

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.14. Xe XIV

Nb isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^5\ {}^6S_{5/2}$

Ionization energy 2 624 000 cm^{-1} (325.3 eV) [70CAR]

The ground state of Xe XIV was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.15. Xe XV

Zr isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^4\ {}^5D_0$

Ionization energy 2 890 000 cm^{-1} (358.3 eV) [70CAR]

The ground state of Xe XV was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.16. Xe XVI

Y isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^3\ {}^4F_{3/2}$

Ionization energy 3 142 000 cm^{-1} (389.6 eV) [70CAR]

The ground state of Xe XVI was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.17. Xe XVII

Sr isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^2\ {}^3F_2$

Ionization energy 3 395 000 cm^{-1} (420.9 eV) [70CAR]

The ground state of Xe XVII was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.18. Xe XVIII

Rb isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d\ {}^2D_{3/2}$

Ionization energy 3 647 000 cm^{-1} (452.2 eV) [70CAR]

The ground state of Xe XVIII was determined by means of a calculation using the Cowan codes [81COW]. Three classified lines have been reported by Sugar *et al.* [92SUG] from work using a tokamak source:

λ(Å)	I	Classification
109.521	30	$4p^6 4d\ {}^2D_{3/2} - 4p^5 4d^2 ({}^1G^\circ)\ {}^2F^\circ_{5/2}$
107.224	40	$4p^6 4d\ {}^2D_{5/2} - 4p^5 4d^2 ({}^1G^\circ)\ {}^2F^\circ_{7/2}$
108.005	60	$4p^6 4d\ {}^2D_{5/2} - 4p^5 4d^2 ({}^3F^\circ)\ {}^2D^\circ_{5/2}$

They quote an uncertainty of 0.005 Å for their wavelengths. The semiempirically corrected value (obtained by smoothing along the isoelectronic sequence) of the first of these lines gives a value of 913 000±42 cm^{-1} for the energy of the $4p^5 4d^2 ({}^1G^\circ)\ {}^2F^\circ_{5/2}$ level with respect to the ground state. The value of the $4p^6 4d\ {}^2D$ splitting was not determined.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

92SUG J. Sugar, V. Kaufman, and W. L. Rowan, J. Opt. Soc. Am. B **9**, 1959 (1992).

4.19. Xe XIX

Kr isoelectronic sequence

Ground State $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6\ ^1S_0$

Ionization energy 4 618 000 cm^{-1} (572.5 eV) [70CAR]

A very partial analysis of the spectrum of 18 times ionized xenon, Xe XIX, was published by Sugar *et al.* [91SUG]. We use their energy levels which are based on semi-empirically smoothed wavelengths. The absence of decimal points for values in the energy level table indicates that the values above zero, in order of increasing value, have uncertainties of about 30 and 40 cm^{-1}, respectively.

Sugar *et al.* [91SUG] classified two Xe XIX resonance lines. They used a tokamak as their light source. The estimated uncertainty of their wavelength measurements is 0.005 Å.

Breton *et al.* [88BRE] classified one line at 106.37 Å which was a small structure on a broad band. They also used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.05 Å. They tentatively assigned the line to a transition between the ground state and a $4p^5 4d$ level. We did not include this line in the Xe XIX line table.

We use the two lines of Sugar *et al.* [91SUG]. Intensities reported are those given in this reference.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XIX levels. Only classifiable lines are included in our compilation.

The intensity code given in the Xe XIX line table is specified below:

Symbol	Definition
p	perturbed by a close line

Crespo López-Urrutia *et al.* [02CRE] tentatively classify a line observed using an EBIT at 4363 ±4 Å as the forbidden intra-configuration transition $4p^5 4d\ ^3P_2 - ^3P_1$.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

88BRE C. Breton, C. DeMichelis, W. Hecq, M. Mattioli, J. Ramette, B. Saoutic, C. Bauche-Arnoult, J. Bauche, and J. F. Wyart, Phys. Scr. **37**, 33 (1988).

91SUG J. Sugar, V. Kaufman, D. H. Baik, Y.-K. Kim, and W. L. Rowan, J. Opt. Soc. Am. B **8**, 2026 (1991).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

Energy levels of Xe XIX

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of Level
0.	0	$4p^6$	^1S	0	91SUG
759 088	1	$4p^5 4d$	$^3D^\circ$	1	91SUG
922 237	1	$4p^5 4d$	$^1P^\circ$	1	91SUG

Spectral Lines of Xe XIX

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
108.409	922.43	10*p*	$4p^6$	^1S	0	–	$4p^5 4d$	$^1P^\circ$	1	0.005	91SUG
131.740	759.07	1	$4p^6$	^1S	0	–	$4p^5 4d$	$^3D^\circ$	1	0.005	91SUG

4.20. Xe XX

Br isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^5\ ^2P^\circ_{3/2}$

Ionization energy 4 901 000 cm^{-1} (607.7 eV) [70CAR]

The ground state of Xe XX was determined by means of a calculation using the Cowan codes [81COW]. Breton *et al.* [88BRE] reported three lines at 107.24, 107.57, and 108.35 Å which were small structures on a broad band. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.05 Å. They tentatively assigned the lines to transitions between the ground configuration doublet $4s^2 4p^5\ ^2P^\circ$ and an unspecified $4s^2 4p^4 4d$ level.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

88BRE C. Breton, C. DeMichelis, W. Hecq, M. Mattioli, J. Ramette, B. Saoutic, C. Bauche-Arnoult, J. Bauche, and J. F. Wyart, Phys. Scr. **37**, 33 (1988).

4.21. Xe XXI

Se isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^4\ ^3P_2$
Ionization energy 5 185 000 cm^{-1} (642.9 eV) [70CAR]

The ground state of Xe XXI was determined by means of a calculation using the Cowan codes [81COW]. Breton *et al.* [88BRE] observed one line at 107.94 Å which was a small structure on a broad band. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.05 Å. They tentatively assigned the line to a transition between the ground state and an unspecified $4p^3 4d$ level.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

88BRE C. Breton, C. DeMichelis, W. Hecq, M. Mattioli, J. Ramette, B. Saoutic, C. Bauche-Arnoult, J. Bauche, and J. F. Wyart, Phys. Scr. **37**, 33 (1988).

4.22. Xe XXII

As isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^3\ ^4S^\circ_{3/2}$
Ionization energy 5 469 000 cm^{-1} (678.1 eV) [70CAR]

The ground state of Xe XXII was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.23. Xe XXIII

Ge isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^2\ ^3P_0$
Ionization energy 5 856 000 cm^{-1} (726.0 eV) [70CAR]

The ground state of Xe XXIII was determined by means of a calculation using the Cowan codes [81COW]. Breton *et al.* [88BRE] observed one line at 114.84 Å which was a small structure on a broadband. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.05 Å. They tentatively assigned the line to a transition between the $4s^2 4p^2\ ^3P_2$ state and an unspecified $4p4d$ level.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

88BRE C. Breton, C. DeMichelis, W. Hecq, M. Mattioli, J. Ramette, B. Saoutic, C. Bauche-Arnoult, J. Bauche, and J. F. Wyart, Phys. Scr. **37**, 33 (1988).

4.24. Xe XXIV

Ga isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p\ ^2P^\circ_{1/2}$
Ionization energy 6 149 000 cm^{-1} (762.4 eV) [70CAR]

The ground state of Xe XXIV was determined by means of a calculation using the Cowan codes [81COW]. Hacker *et al.* [01HAC] reported observing four Xe XXIV lines at 69.8, 80.70, 102.30 (a blend), and 143.60 Å with intensities 5, 15, 25, and 20, respectively. They used a stellarator as their light source. The quoted uncertainty of their wavelength measurements is 0.05–0.10 Å.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

01HAC H. H. Hacker *et al.*, Appl. Phys. B **73**, 59 (2001).

4.25. Xe XXV

Zn isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2\ ^1S_0$
Ionization energy 6 877 000 cm^{-1} (852.7 eV) [70CAR]

Partial analyses of the spectrum of 24 times ionized xenon, Xe XXV, was published by Brown *et al.* [94BRO] and Seely *et al.* [93SEE]. We use the energy levels of Brown *et al.* [94BRO] which are based on semiempirically corrected wavelengths (along the Zn isoelectronic sequence). The absence of decimal points for values in the Xe XXV energy level table is used to indicate that the values above zero have uncertainties of about 200 cm^{-1}.

Hacker *et al.* [01HAC] observed 24 lines which they identified as being from Xe XXV. Twelve of these were compat-

ible with the chosen energy levels. They used a stellarator as their light source. They quote a wavelength uncertainty of 0.05–0.10 Å.

Sugar *et al.* [91SUG] classified two Xe XXV resonance lines. They used a tokamak as their light source. The estimated uncertainty of their wavelength measurements is 0.005 Å. Kaufman *et al.* [88KAU] also classified those two lines. They used the same source. The estimated uncertainty of their wavelength measurements is 0.005 Å. It is their intensity measurement we use for the [91SUG] lines.

Breton *et al.* [88BRE] classified three lines (including the above two). They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.05 Å.

Hinnov *et al.* [87HIN] classified one line (included above). They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.2 Å. Hinnov [76HIN] classified another line (included above). He used another tokamak as his light source. The quoted uncertainty of this wavelength measurement is 0.5 Å.

The order of priority in the selection of duplicate lines for the Xe XXV line list was [91SUG], [88KAU], [01HAC], [88BRE], [87HIN], and [76HIN]. As a result only [91SUG] and [01HAC] lines made the list. The intensities are not on a common scale.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XXV levels. Only classifiable lines are included in our compilation.

The intensity code given in the Xe XXV line table is taken from [01HAC]. Its meaning is stated below:

Symbol	Definition
b	blended line

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

76HIN E. Hinnov, Phys. Rev. **14**, 1533 (1976).

87HIN E. Hinnov, P. Beiersdorfer, R. Bell, J. Stevens, S. Suckewer, S. von Goeler, A. Wouters, D. Dietrich, M. Gerassimenko, and E. Silver, Phys. Rev. A **35**, 4876 (1987).

88BRE C. Breton, C. DeMichelis, W. Hecq, M. Mattioli, J. Ramette, B. Saoutic, C. Bauche-Arnoult, J. Bauche, and J. F. Wyart, Phys. Scr. **37**, 33 (1988).

88KAU V. Kaufman, J. Sugar, and W. L. Rowan, J. Opt. Soc. Am. B **5**, 1273 (1988).

91SUG J. Sugar, V. Kaufman, D. H. Baik, Y-K Kim, and W. L. Rowan, J. Opt. Soc. Am. B **8**, 1795 (1991).

93SEE J. F. Seely and A. Bar-Shalom, At. Data Nucl. Data Tables **55**, 143 (1993).

94BRO C. M. Brown, J. F. Seely, D. R. Kania, B. A. Hammel, C. A. Back, R. W. Lee, A. Bar-Shalom, and W. E. Behring, At. Data Nucl. Data Tables **58**, 203 (1994).

01HAC H. H. Hacker *et al.*, Appl. Phys. B **73**, 59 (2001).

Energy levels of Xe XXV

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$4s^2$	^1S	0	94BRO
371 982	1	$4s4p$	$^3P^\circ$	0	94BRO
396 091	1	$4s4p$	$^3P^\circ$	1	94BRO
516 504	1	$4s4p$	$^3P^\circ$	2	94BRO
608 091	1	$4s4p$	$^1P^\circ$	1	94BRO
974 941	0	$4p^2$	^3P	1	94BRO
982 147	0	$4p^2$	^1D	2	94BRO
1 117 144	0	$4p^2$	^3P	2	94BRO
1 185 198	0	$4p^2$	^1S	0	94BRO
1 242 108	0	$4s4d$	^3D	1	94BRO
1 251 620	0	$4s4d$	^3D	2	94BRO
1 270 879	0	$4s4d$	^3D	3	94BRO
1 341 788	0	$4s4d$	^1D	2	94BRO
2 031 455	1	$4s4f$	$^3F^\circ$	2	94BRO
2 033 693	1	$4s4f$	$^3F^\circ$	3	94BRO
2 038 840	1	$4s4f$	$^3F^\circ$	4	94BRO
2 097 161	1	$4s4f$	$^1F^\circ$	3	94BRO

Spectral Lines of Xe XXV

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
101.66	983.7	30	$4p^2$	^{3}P	2	–	$4s4f$	^{1}F°	3	0.05	01HAC
109.45	913.7	50	$4p^2$	^{3}P	2	–	$4s4f$	^{3}F°	2	0.05	01HAC
114.80	871.1	100b	$4s4p$	^{3}P°	0	–	$4s4d$	^{3}D	1	0.05	01HAC
116.70	856.9	10	$4s4p$	^{3}P°	1	–	$4s4d$	^{3}D	2	0.05	01HAC
131.40	761.0	25	$4s4d$	^{3}D	3	–	$4s4f$	^{3}F°	2	0.05	01HAC
132.65	753.9	160	$4s4p$	^{3}P°	2	–	$4s4d$	^{3}D	3	0.05	01HAC
136.25	733.9	150	$4s4p$	^{1}P°	1	–	$4s4d$	^{1}D	2	0.05	01HAC
145.40	687.8	15	$4s4d$	^{1}D	2	–	$4s4f$	^{3}F°	2	0.05	01HAC
164.412	608.228	400	$4s^2$	^{1}S	0	–	$4s4p$	^{1}P°	1	0.005	91SUG
166.45	600.78	5	$4s4p$	^{3}P°	2	–	$4p^2$	^{3}P	2	0.05	01HAC
252.473	396.082	30	$4s^2$	^{1}S	0	–	$4s4p$	^{3}P°	1	0.005	91SUG
272.5	367.0	10	$4s4p$	^{1}P°	1	–	$4p^2$	^{3}P	1	0.10	01HAC

4.26. Xe XXVI

Cu isoelectronic sequence

Ground state $1s^22s^22p^63s^23p^63d^{10}4s\ ^2S_{1/2}$

Ionization energy 6 912 400±3 000 cm^{-1} (857.0±0.4 eV) [88KAU]

Partial analyses of the spectrum of 25 times ionized xenon, Xe XXVI, were published by Seely *et al.* [89SEE$_b$] and Kaufman *et al.* [88KAU]. In the Xe XXVI level list, we use the energy levels based on semiempirically corrected wavelengths (along the Cu isoelectronic sequence) determined by-Seely *et al.* [89SEE$_b$] for all of the levels in our table except that we use Kaufman *et al.* [88KAU] for the $3d^{10}6g\ ^2$G and $3d^94s4p\ ^2P^\circ_{1/2}$ levels. The absence of decimal points for values in the Xe XXVI energy level table indicates that the values between 1 000 000 and 2 100 000 cm^{-1} are good only to the tens place while those above 2 100 000 cm^{-1} are only known to the hundreds place except for 4 843 100 and 5 225 500 cm^{-1} which are only known to the thousands place.

Hacker *et al.* [01HAC] observed 23 lines which they identified as being from Xe XXVI. Six of these were compatible with the chosen energy levels. They used a stellarator as their light source. They quote a wavelength uncertainty of 0.05–0.10 Å.

Doron *et al.* [99DOR] measured six Xe XXVI "features." They used a laser-excited plasma as their source for spectroscopy. The estimated uncertainty of their wavelength measurements is 0.006 Å. However, each of the features is identified with several lines due to their spectral resolution of only 0.05 Å. Since it was difficult to determine which lines were observed we have not used their Xe XXVI data in this compilation.

Sugar *et al.* [91SUG] classified two Xe XXVI resonance lines. They used a tokamak as their source, as did all the following references. The quoted uncertainty of their wavelength measurements is 0.005 Å. We used the intensity values of [88KAU] for these lines to put these two data sets on a common scale. Seely *et al.* [89SEE$_a$] also classified these two resonance lines. The quoted uncertainty of their wavelength measurements is 0.03 Å. Kaufman *et al.* [88KAU] classified seven lines. The quoted uncertainty of their wavelength measurements is 0.005 Å. Breton *et al.* [88BRE] also classified these seven lines. The quoted uncertainty of their wavelength measurements is 0.05 Å. Wyart *et al.* [85WYA] classified 11 lines. The quoted uncertainty of their wavelength measurements is 0.02 Å. Hinnov [76HIN] first classified the two resonance lines. The quoted uncertainty of his wavelength measurements is 0.5 Å.

Where duplicate lines exist, the priority order used for selection was [91SUG], [88KAU], [85WYA], [89SEE$_a$], [88BRE], [01HAC], and [76HIN]. No [01HAC], [89SEE$_a$], [88BRE], nor [76HIN] lines are in Xe XXVI line list.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XXVI levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] are used to help resolve choices between multiple possible classifications of lines. Except where noted (for [91SUG] and [88KAU]), intensities reported are those given in the stated references and are not on a common scale.

The intensity codes given in the Xe XXVI line table are taken from the stated references. Their meaning is stated below:

Symbol	Definition
b	blend
w	wide line

The ionization energy was determined by Kaufman *et al.* [88KAU] by means of spectral analysis.

References

76HIN E. Hinnov, Phys. Rev. **14**, 1533 (1976).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

85WYA J. F. Wyart, C. Bauche-Arnoult, E. Luc-Koenig, and TFR Group, Phys. Scr. **32**, 103 (1985).

88BRE C. Breton, C. DeMichelis, W. Hecq, M. Mattioli, J. Ramette, B. Saoutic, C. Bauche-Arnoult, J. Bauche, and J. F. Wyart, Phys. Scr. **37**, 33 (1988).

88KAU V. Kaufman, J. Sugar, and W. L. Rowan, J. Opt. Soc. Am. B **5**, 1273 (1988).

89SEE$_a$ J. F. Seely, U. Feldman, A. W. Wouters, J. L. Schwob, and S. Suckewer, Phys. Rev. A **40**, 5020 (1989).

89SEE$_b$ J. F. Seely, C. M. Brown, and U. Feldman, At. Data Nucl. Data Tables **43**, 145 (1989).

91SUG J. Sugar, V. Kaufman, D. H. Baik, Y-K Kim, and W. L. Rowan, J. Opt. Soc. Am. B **8**, 1795 (1991).

99DOR R. Doron, E. Behar, P. Mandelbaum, J. L. Schwob, H. Fiedorowicz, A. Bartnik, R. Jarocki, M. Szczurek, and T. Wilhein, Phys. Rev. A **59**, 188 (1999).

01HAC H. H. Hacker *et al.*, Appl. Phys. B **73**, 59 (2001).

Energy levels of Xe XXVI

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$3d^{10}4s$	^{2}S	1/2	89SEE$_b$
427 411.	1	$3d^{10}4p$	^{2}P°	1/2	89SEE$_b$
574 917.	1	$3d^{10}4p$	^{2}P°	3/2	89SEE$_b$
1 268 220	0	$3d^{10}4d$	^{2}D	3/2	89SEE$_b$
1 297 510	0	$3d^{10}4d$	^{2}D	5/2	89SEE$_b$
2 034 900	1	$3d^{10}4f$	^{2}F°	5/2	89SEE$_b$
2 039 070	1	$3d^{10}4f$	^{2}F°	7/2	89SEE$_b$
2 884 100	0	$3d^{10}5s$	^{2}S	1/2	89SEE$_b$
3 083 100	1	$3d^{10}5p$	^{2}P°	1/2	89SEE$_b$
3 149 700	1	$3d^{10}5p$	^{2}P°	3/2	89SEE$_b$
3 469 100	0	$3d^{10}5d$	^{2}D	3/2	89SEE$_b$
3 483 100	0	$3d^{10}5d$	^{2}D	5/2	89SEE$_b$
3 805 800	1	$3d^{10}5f$	^{2}F°	5/2	89SEE$_b$
3 808 700	1	$3d^{10}5f$	^{2}F°	7/2	89SEE$_b$
3 934 900	0	$3d^{10}5g$	^{2}G	7/2	89SEE$_b$
3 935 900	0	$3d^{10}5g$	^{2}G	9/2	89SEE$_b$
4 843 100	0	$3d^{10}6g$	^{2}G	7/2	88KAU
4 843 300	0	$3d^{10}6g$	^{2}G	9/2	88KAU
5 225 500	1	$3d^{9}4s4p$	^{2}P°	1/2	88KAU

Spectral lines of Xe XXVI

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
19.137	5225.	5	$3d^{10}4s$	^{2}S	1/2	–	$3d^{9}4s4p$	^{2}P°	1/2	0.02	85WYA
34.380	2908.7	5	$3d^{10}4p$	^{2}P°	3/2	–	$3d^{10}5d$	^{2}D	5/2	0.02	85WYA
35.61	2808.2	1	$3d^{10}4f$	^{2}F°	5/2	–	$3d^{10}6g$	^{2}G	7/2	0.02	85WYA
35.660	2804.3	5w	$3d^{10}4f$	^{2}F°	7/2	–	$3d^{10}6g$	^{2}G	9/2	0.02	85WYA
39.410	2537.4	10b	$3d^{10}4d$	^{2}D	3/2	–	$3d^{10}5f$	^{2}F°	5/2	0.02	85WYA
40.731	2455.1	100b	$3d^{10}4p$	^{2}P°	1/2	–	$3d^{10}5s$	^{2}S	1/2	0.02	85WYA
43.315	2308.7	15	$3d^{10}4p$	^{2}P°	3/2	–	$3d^{10}5s$	^{2}S	1/2	0.02	85WYA
52.615	1900.6	10bw	$3d^{10}4f$	^{2}F°	5/2	–	$3d^{10}5g$	^{2}G	7/2	0.02	85WYA
52.710	1897.2	30b	$3d^{10}4f$	^{2}F°	7/2	–	$3d^{10}5g$	^{2}G	9/2	0.02	85WYA
54.030	1850.8	10	$3d^{10}4d$	^{2}D	5/2	–	$3d^{10}5p$	^{2}P°	3/2	0.02	85WYA
55.145	1813.4	10	$3d^{10}4d$	^{2}D	3/2	–	$3d^{10}5p$	^{2}P°	1/2	0.02	85WYA
118.935	840.80	50	$3d^{10}4p$	^{2}P°	1/2	–	$3d^{10}4d$	^{2}D	3/2	0.005	88KAU
130.428	766.71	2	$3d^{10}4d$	^{2}D	3/2	–	$3d^{10}4f$	^{2}F°	5/2	0.005	88KAU
134.852	741.55	5	$3d^{10}4d$	^{2}D	5/2	–	$3d^{10}4f$	^{2}F°	7/2	0.005	88KAU
138.389	722.60	40	$3d^{10}4p$	^{2}P°	3/2	–	$3d^{10}4d$	^{2}D	5/2	0.005	88KAU
144.230	693.34	2	$3d^{10}4p$	^{2}P°	3/2	–	$3d^{10}4d$	^{2}D	3/2	0.005	88KAU
173.938	574.917	400	$3d^{10}4s$	^{2}S	1/2	–	$3d^{10}4p$	^{2}P°	3/2	0.005	91SUG
233.959	427.425	200	$3d^{10}4s$	^{2}S	1/2	–	$3d^{10}4p$	^{2}P°	1/2	0.005	91SUG

4.27. Xe XXVII

Ni isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10}\ ^1S_0$

Ionization energy 12 015 000±36 000 cm^{-1} (1 490±4 eV) [89TRA]

Partial analyses of the spectrum of 26 times ionized xenon, Xe XXVII, were published by Skobelev *et al.* [99SKO], Doron *et al.* [99DOR], Ros *et al.* [98ROS], and Wyart *et al.* [85WYA]. We use the energy levels determined by Skobelev *et al.* [99SKO] for the $3d^9 4p$ levels and we use levels based on the wavelengths of Ros *et al.* [98ROS] for the $3p^5 4s$, $3d^9 4d$, and $3d^9 4f\ ^3P_1^\circ$ levels and the wavelengths of Wyart *et al.* [85WYA] for the other $3d^9 4f$ and the $3d^9 4s$ levels. The absence of decimal points for values in the Xe XXVII energy level table indicates that the values between 4 700 000 and 4 900 000 cm^{-1} have 5000 cm^{-1} uncertainties, the values between 5 000 000 and 6 000 000 cm^{-1} have 150 cm^{-1} uncertainties, the values between 6 500 000 and 7 500 000 cm^{-1} have 10 000 cm^{-1} uncertainties. The 6 356 540 cm^{-1} level has an uncertainty of 500 cm^{-1}.

Lu *et al.* [02LU] reported observing lasing in two Xe XXVII resonance lines. The lasing took place in a picosecond-laser-irradiated gas-puff Xe target. They quote a wavelength uncertainty of 0.2 Å.

Hacker *et al.* [01HAC] observed 14 lines which they identified as being from Xe XXVII. Only one of these was compatible with the chosen energy levels. They used a stellarator as their light source. They quote a wavelength uncertainty of 0.05–0.10 Å.

Skobelev *et al.* [99SKO] classified three Xe XXVII lines. They used a laser-excited plasma as their source for spectroscopy. The quoted uncertainty of their wavelength measurements is 0.0005 Å. With these wavelengths, we use the intensity values of Wyart *et al.* [85WYA] in the Xe XXVII line table, so that all lines with quoted intensities are on a common scale. Doron *et al.* [99DOR] also classified these three Xe XXVII lines. They used a laser-excited plasma as their source for spectroscopy. The estimated uncertainty of their wavelength measurements is 0.006 Å.

Ros *et al.* [98ROS] classified six lines. They used a laser-excited plasma as their source. Their estimated uncertainty is 0.02 Å below 20 Å and is reported as 0.05 Å near 100 Å. Two of these lines, near 100 Å, were reported to be lasing. Fiedorowicz *et al.* [96FIE] also reported strong indications of lasing in Xe XXVII at 100 Å.

Wyart *et al.* [85WYA] classified seven lines. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.02 Å.

Where duplicate lines exist, the priority order used for selection was [99SKO], [99DOR], [85WYA], [98ROS], [01HAC], and [02LU]. No [02LU], [01HAC], or [99DOR] lines are in the Xe XXVII line list.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XXVII levels. Only classifiable lines are included in our compilation.

The intensity code given in the Xe XXVII line table has the meaning stated below:

Symbol	Definition
E2	electric quadrupole line

The ionization energy was determined by Tragin *et al.* [89TRA] by means of semiempirical adjustments of *ab initio* calculations along the Ni isoelectronic sequence.

References

85WYA J. F. Wyart, C. Bauche-Arnoult, E. Luc-Koenig, and TFR Group, Phys. Scr. **32**, 103 (1985).

89TRA N. Tragin, J.-P. Geindre, C. Chenais-Popovics, J.-C. Gauthier, J.-F. Wyart, and E. Luc-Koenig, Phys. Rev. A **39**, 2085 (1989).

96FIE H. Fiedorowicz, A. Bartnik, Y. Li, P. Lu, and E. Fill, Phys. Rev. Lett. **76**, 415 (1996).

98ROS D. Ros, H. Fiedorowicz, B. Rus, A. Bartnik, M. Szczurek, G. Jamelot, F. Albert, A. Carillon, P. Jaeglé, A. Klisnick, S. Sebban and P. Zeitoun, Opt. Commun. **153**, 368 (1998).

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99SKO I. Yu Skobelev, V. M. Dyakin, A. Ya Faenov, A. Bartnik, H. Fiedorowicz, R. Jarocki, J. Kostecki, M. Szczurek, E. Biémont, P. Quinet, J. Nilsen, E. Behar, R. Doron, P. Mandelbaum and J. L. Schwob, J. Phys. B **32**, 113 (1999).

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02LU P. Lu, T. Kawachi, M. Kishimoto, K. Sukegawa, M. Tanaka, N. Hasegawa, M. Suzuki, R. Tai, M. Kado, K. Nagashima, H. Daido, Y. Kato, H. Fiedorowicz, and A. Bartnik, Opt. Lett. **27**, 1911 (2002).

Energy levels of Xe XXVII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$3p^6 3d^{10}$	^1S	0	99SKO
4 771 000	0	$3p^6 3d^9 4s$	(5/2,1/2)	2	85WYA
4 878 000	0	$3p^6 3d^9 4s$	(3/2,1/2)	2	85WYA
5 310 820	1	$3p^6 3d^9 4p$	$^3P^\circ$	1	99SKO
5 356 130	1	$3p^6 3d^9 4p$	$^1P^\circ$	1	99SKO
5 456 880	1	$3p^6 3d^9 4p$	$^3D^\circ$	1	99SKO
6 356 540	0	$3p^6 3d^9 4d$	(3/2,3/2)	0	98ROS
6 757 000	1	$3p^6 3d^9 4f$	$^3P^\circ$	1	98ROS
6 841 000	1	$3p^6 3d^9 4f$	$^3D^\circ$	1	85WYA
7 019 000	1	$3p^6 3d^9 4f$	$^1P^\circ$	1	85WYA
7 375 000	1	$3p^5 3d^{10} 4s$	$(1/2,1/2)^\circ$	1	98ROS

Spectral lines of Xe XXVII

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
13.56	7375.		$3p^63d^{10}$	^{1}S	0	–	$3p^53d^{10}4s$	(1/2,1/2)°	1	0.02	98ROS
14.247	7019.	70	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94f$	^{1}P°	1	0.02	85WYA
14.618	6841.	20	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94f$	^{3}D°	1	0.02	85WYA
14.80	6757.		$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94f$	^{3}P°	1	0.02	98ROS
18.3255	5456.88	40	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94p$	^{3}D°	1	0.0005	99SKO
18.6702	5356.13	70	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94p$	^{1}P°	1	0.0005	99SKO
18.8295	5310.82	30	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94p$	^{3}P°	1	0.0005	99SKO
20.502	4878.	70E2	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94s$	(3/2,1/2)	2	0.02	85WYA
20.961	4771.	100E2	$3p^63d^{10}$	^{1}S	0	–	$3p^63d^94s$	(5/2,1/2)	2	0.02	85WYA
95.60	1046.0		$3p^63d^94p$	^{3}P°	1	–	$3p^63d^94d$	(3/2,3/2)	0	0.05	98ROS
99.99	1000.1		$3p^63d^94p$	^{1}P°	1	–	$3p^63d^94d$	(3/2,3/2)	0	0.05	98ROS

4.28. Xe XXVIII

Co isoelectronic sequence

Ground state $1s^22s^22p^63s^23p^63d^9\ ^2D_{5/2}$

Ionization energy 12 030 000 cm^{-1} (1 491 eV) [70CAR]

A partial analysis of the spectrum of 27 times ionized xenon, Xe XXVIII, was published by Ekberg *et al.* [87EKB]. We use their energy levels which are based on semiempirically corrected wavelengths. The absence of decimal points for values in the energy level table indicates that the values above zero, in order of increasing value, have uncertainties of 110, 210, and 320 cm^{-1}, respectively.

Doron *et al.* [99DOR] measured one Xe XXVIII ''feature'' at 17.735 Å. They used a laser-excited plasma as their source for spectroscopy. The estimated uncertainty of their wavelength measurements is 0.006 Å. However, the feature is identified with several lines due to spectral resolution of only 0.05 Å. Since it is difficult to determine which lines were observed we have not used their Xe XXVIII data in this compilation.

Ros *et al.* [98ROS] measured a blended transition array at 13.70 Å. They used a laser-excited plasma as their source. The estimated uncertainty of their wavelength measurements is 0.02 Å. However, since the array was unresolved we did not include it in our compilation.

Wyart *et al.* [85WYA] classified three lines. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.02 Å. In addition they reported two blended transition arrays including the one observed by Doron *et al.* [99DOR] and the one measured by Ros *et al.* [98ROS]. These arrays have not been included here for the reasons stated above.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XXVIII levels. Only classifiable lines are included in our compilation.

Intensities reported are those given in the stated reference.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

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Energy levels of Xe XXVIII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$3p^63d^9$	^{2}D	5/2	87EKB
109 340	0	$3p^63d^9$	^{2}D	3/2	87EKB
2 056 170	1	$3p^53d^{10}$	^{2}P°	3/2	87EKB
2 579 450	1	$3p^53d^{10}$	^{2}P°	1/2	87EKB

Spectral lines of Xe XXVIII

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
40.490	2469.7	30	$3p^6 3d^9$	^{2}D	3/2	–	$3p^5 3d^{10}$	^{2}P°	1/2	0.02	85WYA
48.640	2055.9	100	$3p^6 3d^9$	^{2}D	5/2	–	$3p^5 3d^{10}$	^{2}P°	3/2	0.02	85WYA
51.355	1947.2	10	$3p^6 3d^9$	^{2}D	3/2	–	$3p^5 3d^{10}$	^{2}P°	3/2	0.02	85WYA

4.29. Xe XXIX

Fe isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^8\,[4,4]_4$

Ionization energy 12 800 000 cm^{-1} (1 587 eV) [70CAR]

Partial analyses of the spectrum of 28 times ionized xenon, Xe XXIX, were published by Ekberg *et al.* [88EKB] and Wyart *et al.* [85WYA]. We use the energy levels determined by Ekberg *et al.* [88EKB] from the data of Wyart *et al.* [85WYA] for all of the levels in the Xe XXIX energy level table except for two levels which are only predicted by Ekberg *et al.* [88EKB]. For these we calculate values of 173 640 and 2 580 960 cm^{-1} from the 40.335 and 41.540 Å lines of [85WYA] using the 101 720 cm^{-1} level of Ekberg *et al.* [88EKB] as a starting point. The absence of decimal points for values in the Xe XXIX energy level table indicates that the values have uncertainties of 500 cm^{-1} except for the 173 640 and 2 580 960 cm^{-1} levels whose uncertainties are 1700 and 1200 cm^{-1}, respectively. Note that we follow Ekberg *et al.* [88EKB] in designating $3p^6 3d^8$ levels with the notation $[N_1, N_2]$ to indicate the number, N_1, of $3d_{3/2}$ and the number, N_2, of $3d_{5/2}$ electrons.

Doron *et al.* [99DOR] reported one Xe XXIX "feature" at 16.9–17.1 Å. They used a laser-excited plasma as their source for spectroscopy. The estimated uncertainty of their wavelength measurements is 0.006 Å. However, the feature is only identified with the $3d^8$–$3d^7 4p$ transition array due to a spectral resolution of only 0.05 Å. Since we cannot determine which lines were observed we have not used their Xe XXIX data in this compilation.

Ros *et al.* [98ROS] measured a blended transition array at 13.27 Å. They used a laser excited plasma as their source. The estimated uncertainty of their wavelength measurements is 0.02 Å. However, since the array was unresolved we did not include it in our compilation.

Wyart *et al.* [85WYA] classified 17 lines. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.02 Å. They also reported the two unresolved transition arrays, at 13.27 and 17.0 Å, which are not included in this compilation.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XXIX levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] are used to help resolve choices between multiple possible classifications of lines. Intensities reported are those given in the stated reference.

The intensity codes given in the Xe XXIX line table have the meaning stated below:

Symbol	Definition
b	blend
w	wide line

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

85WYA J. F. Wyart, C. Bauche-Arnoult, E. Luc-Koenig, and TFR Group, Phys. Scr. **32**, 103 (1985).

88EKB J. O. Ekberg, U. Feldman, and J. Reader, J. Opt. Soc. Am. B **5**, 1275 (1988).

98ROS D. Ros, H. Fiedorowicz, B. Rus, A. Bartnik, M. Szczurek, G. Jamelot, F. Albert, A. Carillon, P. Jaeglé, A. Klisnick, S. Sebban and P. Zeitoun, Opt. Commun. **153**, 368 (1998).

99DOR R. Doron, E. Behar, P. Mandelbaum, J. L. Schwob, H. Fiedorowicz, A. Bartnik, R. Jarocki, M. Szczurek, and T. Wilhein, Phys. Rev. A **59**, 188 (1999).

Energy levels of Xe XXIX

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$3p^6 3d^8$	[4,4]	4	88EKB
46 620	0	$3p^6 3d^8$	[4,4]	2	88EKB
101 720	0	$3p^6 3d^8$	[3,5]	3	88EKB

Energy levels of Xe XXIX—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
145 810	0	$3p^6 3d^8$	[3,5]	2	88EKB
173 640	0	$3p^6 3d^8$	[3,5]	1	85WYA
183 990	0	$3p^6 3d^8$	[3,5]	4	88EKB
241 330+x	0	$3p^6 3d^8$	[2,6]	2	88EKB
1 957 520	1	$3p^5 3d^9$	(3/2,5/2)°	4	88EKB
1 996 510	1	$3p^5 3d^9$	(3/2,5/2)°	2	88EKB
2 060 790	1	$3p^5 3d^9$	(3/2,5/2)°	3	88EKB
2 124 970	1	$3p^5 3d^9$	(3/2,5/2)°	1	88EKB
2 137 340	1	$3p^5 3d^9$	(3/2,3/2)°	2	88EKB
2 186 370	1	$3p^5 3d^9$	(3/2,3/2)°	3	88EKB
2 191 850	1	$3p^5 3d^9$	(3/2,3/2)°	1	88EKB
2 580 960	1	$3p^5 3d^9$	(1/2,5/2)°	2	85WYA
2 639 150	1	$3p^5 3d^9$	(1/2,5/2)°	3	88EKB
2 604 840+x	1	$3p^5 3d^9$	(1/2,3/2)°	2	88EKB

Spectral lines of Xe XXIX

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
39.410	2537.4	10b	$3p^6 3d^8$	[3,5]	3	–	$3p^5 3d^9$	(1/2,5/2)°	3	0.02	85WYA
40.335	2479.2	10	$3p^6 3d^8$	[3,5]	3	–	$3p^5 3d^9$	(1/2,5/2)°	2	0.02	85WYA
40.731	2455.1	100b	$3p^6 3d^8$	[3,5]	4	–	$3p^5 3d^9$	(1/2,5/2)°	3	0.02	85WYA
41.540	2407.3	5	$3p^6 3d^8$	[3,5]	1	–	$3p^5 3d^9$	(1/2,5/2)°	2	0.02	85WYA
42.310	2363.5	5	$3p^6 3d^8$	[2,6]	2	–	$3p^5 3d^9$	(1/2,3/2)°	2	0.02	85WYA
45.730	2186.7	15	$3p^6 3d^8$	[4,4]	4	–	$3p^5 3d^9$	(3/2,3/2)°	3	0.02	85WYA
46.615	2145.2	5w	$3p^6 3d^8$	[4,4]	2	–	$3p^5 3d^9$	(3/2,3/2)°	1	0.02	85WYA
47.970	2084.6	10	$3p^6 3d^8$	[3,5]	3	–	$3p^5 3d^9$	(3/2,3/2)°	3	0.02	85WYA
48.115	2078.4	5	$3p^6 3d^8$	[4,4]	2	–	$3p^5 3d^9$	(3/2,5/2)°	1	0.02	85WYA
48.525	2060.8	50	$3p^6 3d^8$	[4,4]	4	–	$3p^5 3d^9$	(3/2,5/2)°	3	0.02	85WYA
48.875	2046.0	5	$3p^6 3d^8$	[3,5]	2	–	$3p^5 3d^9$	(3/2,3/2)°	1	0.02	85WYA
49.125	2035.6	20	$3p^6 3d^8$	[3,5]	3	–	$3p^5 3d^9$	(3/2,3/2)°	2	0.02	85WYA
49.940	2002.4	15	$3p^6 3d^8$	[3,5]	4	–	$3p^5 3d^9$	(3/2,3/2)°	3	0.02	85WYA
51.085	1957.5	50	$3p^6 3d^8$	[4,4]	4	–	$3p^5 3d^9$	(3/2,5/2)°	4	0.02	85WYA
51.285	1949.9	20w	$3p^6 3d^8$	[4,4]	2	–	$3p^5 3d^9$	(3/2,5/2)°	2	0.02	85WYA
52.220	1915.0	5	$3p^6 3d^8$	[3,5]	2	–	$3p^5 3d^9$	(3/2,5/2)°	3	0.02	85WYA
53.885	1855.8	5	$3p^6 3d^8$	[3,5]	3	–	$3p^5 3d^9$	(3/2,5/2)°	4	0.02	85WYA

4.30. Xe XXX

Mn isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^7\ ^4F_{9/2}$

Ionization energy 13 580 000 cm^{-1} (1 684 eV) [70CAR]

The ground state of Xe XXX was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion. Wyart *et al.* [85WYA] reported observing two unresolved transition arrays at 12.81 and 16.2 Å. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.01–0.02 Å.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

85WYA J. F. Wyart, C. Bauche-Arnoult, E. Luc-Koenig, and TFR Group, Phys. Scr. **32**, 103 (1985).

4.31. Xe XXXI

Cr isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^6\ ^5D_4$

Ionization energy 14 360 000 cm^{-1} (1 781 eV) [70CAR]

The ground state of Xe XXXI was determined by means of a calculation using the Cowan codes [81COW]. Crespo López-Urrutia *et al.* [02CRE] tentatively classify a line ob-

served using an EBIT at 5557±10 Å as a forbidden intraconfiguration transition within the $3d^6$ configuration. Wyart *et al.* [85WYA] reported observing two unresolved transition arrays at 12.4 and 15.5 Å. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.01–0.02 Å.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

85WYA J. F. Wyart, C. Bauche-Arnoult, E. Luc-Koenig, and TFR Group, Phys. Scr. **32**, 103 (1985).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.32. Xe XXXII

V isoelectronic sequence

Ground state $1s^22s^22p^63s^23p^63d^5\,{}^6S_{5/2}$

Ionization energy 15 140 000 cm^{-1} (1 877 eV) [70CAR]

The ground state of Xe XXXII was determined by means of a calculation using the Cowan codes [81COW]. Morgan *et al.* [95MOR] classified a forbidden intraconfiguration transition within the $3d^5$ configuration at 3962.5 Å as ${}^4G_{7/2}-{}^4G_{9/2}$. They used an EBIT as their source and their uncertainty was 2 Å. Crespo López-Urrutia *et al.* [02CRE], also using an EBIT, observed this line and another one at 5984±10 Å which they classified as ${}^4G_{9/2}-{}^4G_{11/2}$ within the same configuration.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

95MOR C. A. Morgan, F. G. Serpa, E. Takács, E. S. Meyer, J. D. Gillaspy, J. Sugar, J. R. Roberts, C. M. Brown, and U. Feldman, Phys. Rev. Lett. **74**, 1716 (1995).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.33. Xe XXXIII

Ti isoelectronic sequence

Ground state $1s^22s^22p^63s^23p^63d^4\,{}^5D_0$

Ionization energy 16 030 000 cm^{-1} (1 987 eV) [70CAR]

The ground state of Xe XXXIII was reported as ${}^5D_0$ by Serpa *et al.* [97SER]. A calculation using the Cowan codes [81COW] indicates that although the ground state has its largest contribution from the ${}^5D_0$, the next lowest $J=0$ even parity level has a somewhat larger contribution of ${}^5D_0$ than the ground state. One forbidden intraconfiguration transition within the $3d^4$ configuration has been observed by several groups using EBIT sources. It was first reported by Morgan *et al.* [95MOR] and classified as ${}^5D_3-{}^5D_2$. Watanabe *et al.* [01WAT] reported a wavelength of 4138.8±0.7 Å. Crespo López-Urrutia *et al.* [02CRE] also observed this line.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

95MOR C. A. Morgan, F. G. Serpa, E. Takács, E. S. Meyer, J. D. Gillaspy, J. Sugar, J. R. Roberts, C. M. Brown, and U. Feldman, Phys. Rev. Lett. **74**, 1716 (1995).

97SER F. G. Serpa, C. A. Morgan, E. S. Meyer, J. D. Gillaspy, E. Träbert, D. A. Church, and E. Takács, Phys. Rev. **55**, 4196 (1997).

01WAT H. Watanabe, D. Crosby, F. J. Currell, T. Fukami, D. Kato, S. Ohtani, J. D. Silver, and C. Yamada, Phys. Rev A **63**, 042513 (2001).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.34. Xe XXXIV

Sc isoelectronic sequence

Ground state $1s^22s^22p^63s^23p^63d^3\,{}^4F_{3/2}$

Ionization energy 16 820 000 cm^{-1} (2 085 eV) [70CAR]

The ground state of Xe XXXIV was determined by means of a calculation using the Cowan codes [81COW]. Crespo López-Urrutia *et al.* [02CRE] report two lines observed using an EBIT at 4456±5 Å and at 6327±15 Å as unclassified forbidden transitions. No other lines and no level energies have been reported.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.35. Xe XXXV

Ca isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d^2\ ^3F_2$
Ionization energy 17 610 000 cm^{-1} (2 183 eV) [70CAR]

The ground state of Xe XXXV was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.36. Xe XXXVI

K isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6 3d\ ^2D_{3/2}$
Ionization energy 18 400 000 cm^{-1} (2 281 eV) [70CAR]

The ground state of Xe XXXVI was determined by means of a calculation using the Cowan codes [81COW]. Crespo López-Urrutia *et al.* [02CRE] report a weak line observed using an EBIT at 5479±10 Å as an unclassified forbidden transition. No other lines and no level energies have been reported.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.37. Xe XXXVII

Ar isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^6\ ^1S_0$
Ionization energy 20 550 000 cm^{-1} (2 548 eV) [70CAR]

Crespo López-Urrutia *et al.* [02CRE] report a weak line observed using an EBIT at 4970±6 Å as an unclassified Xe XXXVII forbidden transition. No other lines and no level energies have been reported.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.38. Xe XXXVIII

Cl isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^5\ ^2P^\circ_{3/2}$
Ionization energy 21 270 000 cm^{-1} (2 637 eV) [70CAR]

The ground state of Xe XXXVIII was determined by means of a calculation using the Cowan codes [81COW]. Crespo López-Urrutia *et al.* [02CRE] report two weak lines observed using an EBIT at 6066±15 Å and at 6142±15 Å as unclassified forbidden transitions. No other lines and no level energies have been reported.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

02CRE J. R. Crespo López-Urrutia, P. Beiersdorfer, K. Widmann, and V. Decaux, Can. J. Phys. **80**, 1687 (2002).

4.39. Xe XXXIX

S isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^4\ ^3P_2$
Ionization energy 21 990 000 cm^{-1} (2 726 eV) [70CAR]

The ground state of Xe XXXIX was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.40. Xe XL

P isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^3\ {}^4S^\circ_{3/2}$
Ionization energy 22 700 000 cm^{-1} (2 814 eV) [70CAR]

The ground state of Xe XL was determined by means of a calculation using the Cowan codes [81COW]. We note that the ground state is quite mixed and the $^4S^\circ$ is not even the largest contributor to the eigenvector. No wavelengths or energy levels have been reported for this ion.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.41. Xe XLI

Si isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p^2\ {}^3P_0$
Ionization energy 24 200 000 cm^{-1} (3 001 eV) [70CAR]

The ground state of Xe XLI was determined by means of a calculation using the Cowan codes [81COW]. Träbert *et al.* [95TRA], using beam–foil spectroscopy, tentatively identified two lines at 120±1 Å and 127.9±1.0 Å as the intercombination transitions $3s^2 3p^2\ {}^3P_{1,2}$–$3s3p^3\ {}^5S^\circ_2$. However this classification remains in dispute [97BEN], [99TRA], [03HUA].

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

95TRA E. Träbert, J. Doerfert, J. Granzow, R. Büttner, U. Staude, K.-H. Schartner, P. Rymuza, L. Engström, and R. Hutton, Z. Phys. D **32**, 295 (1995).

97BEN P. Bengtsson, K. Ando, T. Kambara, Y. Awaya, and R. Hutton, Phys. Scr. **T73**, 81 (1997).

99TRA E. Träbert, Phys. Scr. **59**, 443 (1999).

03HUA M. Huang, R. Hutton, Y. Zou, K. Ando, and H. Oyama, Nucl. Instrum. Methods Phys. Res. B **205**, 119 (2003).

4.42. Xe XLII

Al isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2 3p\ {}^2P^\circ_{1/2}$
Ionization energy 24 950 000 cm^{-1} (3 093 eV) [70CAR]

The ground state of Xe XLII was determined by means of a calculation using the Cowan codes [81COW]. Träbert *et al.* [95TRA], using beam–foil spectroscopy, observed three lines. They classified them as intercombination transitions between the $3s^2 3p$ and $3s3p^2$ configurations: $^2P^\circ_{1/2}$–$^4P_{1/2}$ at 122.5±0.5 Å, $^2P^\circ_{3/2}$–$^4P_{5/2}$ at 127.9±1.0 Å (a blend), and $^2P^\circ_{3/2}$–$^4P_{3/2}$ at 147.±2. Å.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

95TRA E. Träbert, J. Doerfert, J. Granzow, R. Büttner, U. Staude, K.-H. Schartner, P. Rymuza, L. Engström, and R. Hutton, Z. Phys. D **32**, 295 (1995).

4.43. Xe XLIII

Mg isoelectronic sequence
Ground state $1s^2 2s^2 2p^6 3s^2\ {}^1S_0$
Ionization energy 26 580 000 cm^{-1} (3 296 eV) [70CAR]

An analysis of the spectrum of 42 times ionized xenon, Xe XLIII, using fitted energy levels across the Mg isoelectronic sequence, was published by Ekberg *et al.* [91EKB]. We use the energy levels determined by Ekberg *et al.* [91EKB] for all of the levels in the Xe XLIII energy level table. The absence of decimal points for values in the table indicates that the values have uncertainties of 300–500 cm^{-1} (with the higher uncertainties for the higher values).

Träbert *et al.* [95TRA] reported three possible Xe XLIII lines but two were blended with lines of other Xe ions. They used beam foil spectroscopy for their measurements. The estimated uncertainty of their wavelength measurements is 0.5 Å.

Ekberg *et al.* [91EKB], while reporting no measurements on Xe XLIII, did refer to unpublished Xe XLIII data taken at the PLT tokamak for one line which they use in their observed column to compare with their fitted value of level energy. We use this line. The estimated uncertainty of the wavelength measurements is 0.03 Å.

Seely *et al.* [88SEE] classified one line. They used a tokamak as their light source. The quoted uncertainty of their wavelength measurements is 0.03 Å.

Where duplicate lines exist, the priority order used for selection was [88SEE], [91EKB], and [95TRA]. No [95TRA] lines are in the Xe XLIII line table.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe XLIII levels. Only classifiable lines are included in our compilation.

Transition probability calculations utilizing the Cowan codes [81COW] and the presence/intensity of lines in the

isoelectronic sequence are used to help resolve choices between multiple possible classifications of lines. An "*" in the intensity and comment column of the line table indicates that the line is multiply classified.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

88SEE J. F. Seely, J. O. Ekberg, U. Feldman, J. L. Schwob, S. Suckewer, and A. Wouters, J. Opt. Soc. Am. B **5**, 602 (1988).

91EKB J. O. Ekberg, U. Feldman, J. F. Seely, C. M. Brown, B. J. MacGowan, D. R. Kania, and C. J. Keane, Phys. Scr. **43**, 19 (1991).

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Energy levels of Xe XLIII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$3s^2$	^{1}S	0	91EKB
699 590	1	$3s3p$	^{3}P°	0	91EKB
769 730	1	$3s3p$	^{3}P°	1	91EKB
1 381 050	1	$3s3p$	^{3}P°	2	91EKB
1 589 960	1	$3s3p$	^{1}P°	1	91EKB
1 678 350	0	$3p^2$	^{3}P	0	91EKB
2 283 100	0	$3p^2$	^{1}D	2	91EKB
2 289 410	0	$3p^2$	^{3}P	1	91EKB
2 582 630	0	$3p^2$	^{3}P	2	91EKB
3 121 880	0	$3p^2$	^{1}S	0	91EKB
2 546 510	0	$3s3d$	^{3}D	1	91EKB
2 698 720	0	$3s3d$	^{3}D	3	91EKB
2 770 070	0	$3s3d$	^{3}D	2	91EKB
3 059 000	0	$3s3d$	^{1}D	2	91EKB
3 303 830	1	$3p3d$	^{3}F°	2	91EKB
3 479 340	1	$3p3d$	^{3}D°	1	91EKB
3 550 070	1	$3p3d$	^{1}D°	2	91EKB
3 550 430	1	$3p3d$	^{3}F°	3	91EKB
4 044 980	1	$3p3d$	^{3}D°	2	91EKB
4 102 860	1	$3p3d$	^{3}D°	3	91EKB
4 105 720	1	$3p3d$	^{3}P°	0	91EKB
4 107 190	1	$3p3d$	^{3}P°	1	91EKB
4 136 570	1	$3p3d$	^{3}F°	4	91EKB
4 210 850	1	$3p3d$	^{3}P°	2	91EKB
4 330 260	1	$3p3d$	^{1}F°	3	91EKB
4 390 230	1	$3p3d$	^{1}P°	1	91EKB
5 158 810	0	$3d^2$	^{3}F	2	91EKB
5 288 520	0	$3d^2$	^{3}P	0	91EKB
5 290 180	0	$3d^2$	^{3}F	3	91EKB
5 355 740	0	$3d^2$	^{3}F	4	91EKB
5 360 640	0	$3d^2$	^{1}D	2	91EKB
5 384 250	0	$3d^2$	^{3}P	1	91EKB
5 480 060	0	$3d^2$	^{1}G	4	91EKB
5 525 460	0	$3d^2$	^{3}P	2	91EKB

Spectral lines of Xe XLIII

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
62.88	1590.3	*	$3s^2$	^{1}S	0	–	$3s3p$	^{1}P°	1	0.03	91EKB
62.88	1590.3	*	$3s3p$	^{3}P°	0	–	$3p^2$	^{3}P	1	0.03	91EKB
129.93	769.65		$3s^2$	^{1}S	0	–	$3s3p$	^{3}P°	1	0.03	88SEE

4.44. Xe XLIV

Na isoelectronic sequence

Ground state $1s^2 2s^2 2p^6 3s\ ^2S_{1/2}$

Ionization energy $26\,889\,000 \pm 2\,000$ cm^{-1} ($3\,333.8 \pm 0.2$ eV) [88THE]

Analyses of the spectrum of 43 times ionized xenon, Xe XLIV, using fitted energy levels across the Na isoelectronic sequence, were published by Seely *et al.* [91SEE] and Matsushima *et al.* [91MAT]. We use the energy levels determined by Seely *et al.* [91SEE] for the levels in the Xe XLIV energy level table with values below 13.5×10^6 cm^{-1} and those of Matsushima *et al.* [91MAT] for higher values. The absence of decimal points for values in the energy level table indicates that the Seely *et al.* [91SEE] values have uncertainties of 33 cm^{-1} for the $3p_{1/2}$, 110 cm^{-1} for the $3p_{3/2}$, 200 cm^{-1} for the $3d$, 5000 cm^{-1} for the $4s$, and 500 cm^{-1} for the $4p$ and $4d$ levels. The uncertainties for the Matsushima *et al.* [91MAT] values are 1200 cm^{-1} for the $n=4$ levels, 2400 cm^{-1} for the $n=5$ levels, and 4400 cm^{-1} for the $n=6$ levels.

Träbert *et al.* [95TRA] reported four Xe XLIV lines. They used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurements is 0.5 Å except for 1.0 Å for the 59.1 Å line.

Seely and Wagner [90SEE], while reporting no measurements on Xe XLIV, did refer to unpublished Xe XLIV data taken at the PLT tokamak for two lines. We use these lines. The estimated uncertainty of the wavelength measurements is 0.03 Å.

Where duplicate lines exist, the priority order used for selection for the Xe XLIV line table was [90SEE] then [95TRA].

All candidate lines for the line table are passed through a program to determine if they correspond to a transition between the known Xe XLIV levels. Only classifiable lines are included in our compilation.

Conturie *et al.* [81CON] reported seven dielectronic satellite lines. They used laser imploded targets as their light source. The quoted uncertainty of their wavelength measurements is 0.003 Å. Since we do not have energy values for the levels involved, we report these lines in a separate Xe XLIV dielectronic satellite lines table. In this table the intensity code "w" indicates a wide line.

The ionization energy was determined by Theodosiou and Curtis [88THE] by means of semiempirical calculations.

References

81CON Y. Conturie, B. Yaakobi, U. Feldman, G. A. Doschek, and R. D. Cowan, J. Opt. Soc. Am. **71**, 1309 (1981).

88THE C. E. Theodosiou and L. J. Curtis, Phys. Rev. A **38**, 4435 (1988).

90SEE J. F. Seely and R. A. Wagner, Phys. Rev. A **41**, 5246 (1990).

91MAT I. Matsushima, J.-P. Geindre, C. Chenais-Popovics, J.-C. Gauthier, and J.-F. Wyart, Phys. Scr. **43**, 33 (1991).

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95TRA E. Träbert, J. Doerfert, J. Granzow, R. Büttner, U. Staude, K.-H. Schartner, P. Rymuza, L. Engström, and R. Hutton, Z. Phys. D **32**, 295 (1995).

Xe XLIV dielectronic satellite lines $2p^6 3d - (2p^5 3s 3d, 2p^5 3d^2)$

Observed vacuum wavelength (Å)	Intensity and comment
2.752	5 w
2.739	3
2.736	4
2.732	4
2.578	2 w
2.567	5
2.564	5

Energy levels of Xe XLIV

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$3s$	^{2}S	1/2	91SEE
806 985	1	$3p$	^{2}P°	1/2	91SEE
1 501 276	1	$3p$	^{2}P°	3/2	91SEE
2 523 660	0	$3d$	^{2}D	3/2	91SEE
2 679 380	0	$3d$	^{2}D	5/2	91SEE
12 263 000	0	$4s$	^{2}S	1/2	91SEE
12 596 000	1	$4p$	^{2}P°	1/2	91SEE
12 880 000	1	$4p$	^{2}P°	3/2	91SEE
13 260 300	0	$4d$	^{2}D	3/2	91SEE
13 331 400	0	$4d$	^{2}D	5/2	91SEE

Energy levels of Xe XLIV—Continued

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
13 535 960	1	$4f$	$^2F^\circ$	5/2	91MAT
13 565 090	1	$4f$	$^2F^\circ$	7/2	91MAT
17 707 860	0	$5s$	^2S	1/2	91MAT
17 876 490	1	$5p$	$^2P^\circ$	1/2	91MAT
18 018 300	1	$5p$	$^2P^\circ$	3/2	91MAT
18 207 450	0	$5d$	^2D	3/2	91MAT
18 242 330	0	$5d$	^2D	5/2	91MAT
18 342 070	1	$5f$	$^2F^\circ$	5/2	91MAT
18 356 850	1	$5f$	$^2F^\circ$	7/2	91MAT
18 371 490	0	$5g$	^2G	7/2	91MAT
18 380 270	0	$5g$	^2G	9/2	91MAT
20 588 070	0	$6s$	^2S	1/2	91MAT
20 684 390	1	$6p$	$^2P^\circ$	1/2	91MAT
20 765 470	1	$6p$	$^2P^\circ$	3/2	91MAT
20 872 670	0	$6d$	^2D	3/2	91MAT
20 892 990	0	$6d$	^2D	5/2	91MAT
20 951 570	1	$6f$	$^2F^\circ$	5/2	91MAT
20 960 220	1	$6f$	$^2F^\circ$	7/2	91MAT

Spectral lines of Xe XLIV

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
59.1	1690		$3p$	$^2P^\circ$	1/2	–	$3d$	^2D	3/2	1.0	95TRA
66.58	1502.0		$3s$	^2S	1/2	–	$3p$	$^2P^\circ$	3/2	0.03	90SEE
84.8	1179.		$3p$	$^2P^\circ$	3/2	–	$3d$	^2D	5/2	0.5	95TRA
123.92	806.97		$3s$	^2S	1/2	–	$3p$	$^2P^\circ$	1/2	0.03	90SEE

4.45. Xe XLV

Ne isoelectronic sequence

Ground state $1s^2 2s^2 2p^6\ ^1S_0$

Ionization energy 58 270 000 cm^{-1} (7 224 eV) [70CAR]

The energy levels we report in the Xe XLV level table for 44 times ionized xenon, Xe XLV, were calculated from the classified lines reported below. The absence of decimal points for values in the energy level table indicates their large uncertainties. Most have uncertainties that range from 1×10^3–9×10^3 cm^{-1}. Those values with larger uncertainties (in units of 10^3 cm^{-1}) are 35 367, 36 307, 36 360, 36 443, 36 480, 37 376, and 39 005 which have (in units of 10^3 cm^{-1}) 10, 21, 16, 12, 16, 17, and 15 uncertainties, respectively.

Werner *et al.* [01WER] reported 21 Xe XLV lines. They used an EBIT as their light source. The estimated uncertainty of the wavelength measurements is 0.0005–0.0012 Å.

Träbert *et al.* [95TRA] reported two Xe XLV lines. They used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurements is 0.5 Å.

Aglitskii *et al.* [89AGL] reported seven electric dipole Xe XLV lines. They used a low-inductance vacuum spark as their light source. The estimated uncertainty of the wavelength measurements is 0.0016 Å.

Beiersdorfer *et al.* [88BEI] reported 12 Xe XLV lines of which seven were electric dipole, four were electric quadrupole, and one was magnetic quadrupole. They used a tokamak as their light source. The estimated uncertainty of the wavelength measurements is 0.0001 Å.

Conturie *et al.* [81CON] reported five lines. They used laser imploded targets as their light source. The quoted uncertainty of their wavelength measurements is 0.003 Å.

Where duplicate lines exist, the priority order used for selection for the Xe XLV line table was [88BEI], [01WER], [89AGL], [81CON], then [95TRA]. No [81CON] lines appear in the final list.

All candidate electric dipole lines for the line table are passed through a program to determine if they correspond to a transition between the known Xe XLV levels. The E2, M1, and M2 lines are checked by hand. Only classifiable lines are included in our compilation.

The intensity codes given in the Xe XLV line table are specified below:

Symbol	Definition
E2	electric quadrupole transition
M1	magnetic dipole transition
M2	magnetic quadrupole transition

Asada *et al.* [97ASA] and DeWitt *et al.* [92DEW] report several dielectronic recombination lines. They used EBIT sources. Their energy uncertainties are estimated to be 0.03 keV. Since we do not have energy levels for these lines, we quote them in a separate Xe XLV dielectronic recombination series table. In this table ''Process'' is auger notation for the dielectronic recombination process. *XYZ* signifies the process in which the ion captures a free electron causing an electron in the *X* shell of the ion to be excited to the *Y* shell while the captured electron is held in the *Z* shell.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81CON Y. Conturie, B. Yaakobi, U. Feldman, G. A. Doschek, and R. D. Cowan, J. Opt. Soc. Am. **71**, 1309 (1981).

88BEI P. Beiersdorfer, S. von Goeler, M. Bitter, E. Hinnov, R. Bell, S. Bernabei, J. Felt, K. W. Hill, R. Hulse, J. Stevens, S. Suckewer, J. Timberlake, A. Wouters, M. H. Chen, J. H. Scofield, D. D. Dietrich, M. Gerassimenko, E. Silver, R. S. Walling, and P. L. Hagelstein, Phys. Rev. A **37**, 4153 (1988).

89AGL E. V. Aglitskii, E. P. Ivanova, S. A. Panin, U. I. Safronova, S. I. Ulityn, L. A. Vainshtein, and J.-F. Wyart, Phys. Scr. **40**, 601 (1989).

92DEW D. R. DeWitt, D. Schneider, M. H. Chen, M. W. Clark, J. W. McDonald, and M. B. Schneider, Phys. Rev. Lett. **68**, 1694 (1992).

95TRA E. Träbert, J. Doerfert, J. Granzow, R. Büttner, U. Staude, K.-H. Schartner, P. Rymuza, L. Engström, and R. Hutton, Z. Phys. D **32**, 295 (1995).

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01WER T. Werner, G. Zschornack, F. Großmann, V. P. Ovsyannikov, and E. Ullmann, Phys. Scr. **T92**, 241 (2001).

Xe XLV Dielectronic recombination series (taken from 97 ASA)

Process	97ASA resonant energy (keV)	92DEW resonant energy (keV)
LMN($3d4p$)	2.80	2.77
LMN($3d4d$)	2.84	2.86
LMN($3d4f$)	2.93	2.90
LMO	3.15	3.18
LMP	3.47	3.48
LMQ	3.82	3.81
LMR	3.99	4.01
LNM	2.96	
LNN	4.04	
LNO	4.50	
LNP	4.78	
LNQ	4.93	

Energy levels of Xe XLV

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0	0	$2p^6$	^1S	0	88BEI
33 957 000	1	$2p^5_{3/2}3s_{1/2}$	$(3/2,1/2)^\circ$	2	88BEI
34 001 000	1	$2p^5_{3/2}3s_{1/2}$	$(3/2,1/2)^\circ$	1	88BEI
36 646 000	1	$2p^5_{1/2}3s_{1/2}$	$(1/2,1/2)^\circ$	1	88BEI
34 688 000	0	$2p^5_{3/2}3p_{1/2}$	(3/2,1/2)	1	01WER
34 723 000	0	$2p^5_{3/2}3p_{1/2}$	(3/2,1/2)	2	88BEI
35 367 000	0	$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	3	95TRA
35 387 000	0	$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	1	01WER
35 479 000	0	$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	2	88BEI
37 376 000	0	$2p^5_{1/2}3p_{1/2}$	(1/2,1/2)	1	01WER
38 069 000	0	$2p^5_{1/2}3p_{3/2}$	(1/2,3/2)	1	01WER
38 137 000	0	$2p^5_{1/2}3p_{3/2}$	(1/2,3/2)	2	88BEI
36 307 000	1	$2p^5_{3/2}3d_{3/2}$	$(3/2,3/2)^\circ$	1	89AGL
36 360 000	1	$2p^5_{3/2}3d_{3/2}$	$(3/2,3/2)^\circ$	2	01WER
36 443 000	1	$2p^5_{3/2}3d_{5/2}$	$(3/2,5/2)^\circ$	4	95TRA
36 480 000	1	$2p^5_{3/2}3d_{5/2}$	$(3/2,5/2)^\circ$	2	01WER
36 761 000	1	$2p^5_{3/2}3d_{5/2}$	$(3/2,5/2)^\circ$	1	88BEI
39 005 000	1	$2p^5_{1/2}3d_{3/2}$	$(1/2,3/2)^\circ$	2	01WER
39 177 000	1	$2p^5_{1/2}3d_{3/2}$	$(1/2,3/2)^\circ$	1	88BEI
39 917 000	1	$2s_{1/2}3p_{1/2}$	$(1/2,1/2)^\circ$	1	88BEI
40 603 000	1	$2s_{1/2}3p_{3/2}$	$(1/2,3/2)^\circ$	2	01WER
40 649 000	1	$2s_{1/2}3p_{3/2}$	$(1/2,3/2)^\circ$	1	88BEI
41 506 000	0	$2s_{1/2}3d_{3/2}$	(1/2,3/2)	1	01WER
41 545 000	0	$2s_{1/2}3d_{3/2}$	(1/2,3/2)	2	01WER
41 769 000	0	$2s_{1/2}3d_{5/2}$	(1/2,5/2)	2	88BEI
47 717 000	1	$2p^5_{3/2}4d_{5/2}$	$(3/2,5/2)^\circ$	1	88BEI

Spectral lines of Xe XLV

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2.0957	47 717.		$2p^6$	^{1}S	0	–	$2p^5_{3/2}4d_{5/2}$	(3/2,5/2)°	1	.0001	88BEI
2.3941	41 769.	E2	$2p^6$	^{1}S	0	–	$2s_{1/2}3d_{5/2}$	(1/2,5/2)	2	.0001	88BEI
2.4070	41 545.	E2	$2p^6$	^{1}S	0	–	$2s_{1/2}3d_{3/2}$	(1/2,3/2)	2	.0005	01WER
2.4093	41 506.	M1	$2p^6$	^{1}S	0	–	$2s_{1/2}3d_{3/2}$	(1/2,3/2)	1	.0005	01WER
2.4601	40 649.		$2p^6$	^{1}S	0	–	$2s_{1/2}3p_{3/2}$	(1/2,3/2)°	1	.0001	88BEI
2.4629	40 603.	M2	$2p^6$	^{1}S	0	–	$2s_{1/2}3p_{3/2}$	(1/2,3/2)°	2	.0005	01WER
2.5052	39 917.		$2p^6$	^{1}S	0	–	$2s_{1/2}3p_{1/2}$	(1/2,1/2)°	1	.00015	88BEI
2.5525	39 177.		$2p^6$	^{1}S	0	–	$2p^5_{1/2}3d_{3/2}$	(1/2,3/2)°	1	.0001	88BEI
2.5638	39 005.	M2	$2p^6$	^{1}S	0	–	$2p^5_{1/2}3d_{3/2}$	(1/2,3/2)°	2	.0010	01WER
2.6221	38 137.	E2	$2p^6$	^{1}S	0	–	$2p^5_{1/2}3p_{3/2}$	(1/2,3/2)	2	.00025	88BEI
2.6268	38 069.	M1	$2p^6$	^{1}S	0	–	$2p^5_{1/2}3p_{3/2}$	(1/2,3/2)	1	.0006	01WER
2.6755	37 376.	M1	$2p^6$	^{1}S	0	–	$2p^5_{1/2}3p_{1/2}$	(1/2,1/2)	1	.0012	01WER
2.7203	36 761.		$2p^6$	^{1}S	0	–	$2p^5_{3/2}3d_{5/2}$	(3/2,5/2)°	1	.0001	88BEI
2.7288	36 646.		$2p^6$	^{1}S	0	–	$2p^5_{1/2}3s_{1/2}$	(1/2,1/2)°	1	.0001	88BEI
2.7412	36 480.	M2	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3d_{5/2}$	(3/2,5/2)°	2	.0012	01WER
2.7503	36 360.	M2	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3d_{3/2}$	(3/2,3/2)°	2	.0012	01WER
2.7543	36 310		$2p^6$	^{1}S	0	–	$2p^5_{3/2}3d_{3/2}$	(3/2,3/2)°	1	.0016	89AGL
2.8186	35 479.	E2	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	2	.0001	88BEI
2.8259	35 387.	M1	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	1	.0006	01WER
2.8799	34 723.	E2	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3p_{1/2}$	(3/2,1/2)	2	.0001	88BEI
2.8828	34 688.	M1	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3p_{1/2}$	(3/2,1/2)	1	.0007	01WER
2.9411	34 001.		$2p^6$	^{1}S	0	–	$2p^5_{3/2}3s_{1/2}$	(3/2,1/2)°	1	.0001	88BEI
2.9449	33 957.	M2	$2p^6$	^{1}S	0	–	$2p^5_{3/2}3s_{1/2}$	(3/2,1/2)°	2	.0001	88BEI
70.9	1 410.		$2p^5_{3/2}3s_{1/2}$	(3/2,1/2)°	2	–	$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	3	0.5	95TRA
93.0	1 075.		$2p^5_{3/2}3p_{3/2}$	(3/2,3/2)	3	–	$2p^5_{3/2}3d_{5/2}$	(3/2,5/2)°	4	0.5	95TRA

4.46. Xe XLVI

F isoelectronic sequence

Ground state $1s^22s^22p^5\,^2P^\circ_{3/2}$

Ionization energy 60 420 000 cm^{-1} (7 491 eV) [70CAR]

The ground state of Xe XLVI was determined by means of a calculation using the Cowan codes [81COW]. Conturie *et al.* [81CON] reported six features, all but one of which are a blend of possible lines. They used laser imploded targets as their light source. The quoted uncertainty of their wavelength measurements is 0.003 Å. Werner *et al.* [01WER] reported 11 Xe XLVI lines. They used an EBIT as their light source. The estimated uncertainty of their wavelength measurements is 0.0006 Å. The one distinct line of Conturie *et al.* [81CON] agrees with a wavelength of Werner *et al.* [01WER] but they disagree on the partial classifications. The wavelengths reported by Werner *et al.* [01WER] are (in Å) 2.4757, 2.4972, 2.5088, 2.6515, 2.6572, 2.6686, 2.6778, 2.8437, 2.8660, 2.8707, and 2.8820.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81CON Y. Conturie, B. Yaakobi, U. Feldman, G. A. Doschek, and R. D. Cowan, J. Opt. Soc. Am. **71**, 1309 (1981).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

01WER T. Werner, G. Zschornack, F. Großmann, V. P. Ovsyannikov, and E. Ullmann, Phys. Scr. **T92**, 241 (2001).

4.47. Xe XLVII

O isoelectronic sequence

Ground state $1s^22s^22p^4\,^3P_2$

Ionization energy 62 570 000 cm^{-1} (7 758 eV) [70CAR]

The ground state of Xe XLVII was determined by means of a calculation using the Cowan codes [81COW]. Conturie *et al.* [81CON] reported two features, at 2.607 and 2.620 Å, which are blends of possible lines. They used laser imploded targets as their light source. The quoted uncertainty of their wavelength measurements is 0.003 Å.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81CON Y. Conturie, B. Yaakobi, U. Feldman, G. A. Doschek, and R. D. Cowan, J. Opt. Soc. Am. **71**, 1309 (1981).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

4.48. Xe XLVIII

N isoelectronic sequence
Ground state $1s^2 2s^2 2p^3\ ^4S^\circ_{3/2}$
Ionization energy 64 720 000 cm^{-1} (8 024 eV) [70CAR]

The ground state of Xe XLVIII was determined by means of a calculation using the Cowan codes [81COW]. We note that the ground state is strongly mixed and the $^4S^\circ$ is not even the largest contributor to the eigenvector. No wavelengths or energy levels have been reported for this ion except for a few Rydberg transitions between 70 and 120 Å from upper levels with $n=8-11$ observed by Büttner *et al.* [92BUT] in beam–foil studies.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

92BUT R. Büttner, B. Kraus, K.-H. Schartner, F. Folkmann, P. H. Mokler, and G. Möller, Z. Phys. D **22**, 693 (1992).

4.49. Xe XLIX

C isoelectronic sequence
Ground state $1s^2 2s^2 2p^2\ ^3P_0$
Ionization energy 69 500 000 cm^{-1} (8 617 eV) [70CAR]

The ground state of Xe XLIX was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion except for a few Rydberg transitions between 67 and 123 Å from upper levels with $n=8-12$ observed by Büttner *et al.* [92BUT] in beam–foil studies.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

92BUT R. Büttner, B. Kraus, K.-H. Schartner, F. Folkmann, P. H. Mokler, and G. Möller, Z. Phys. D **22**, 693 (1992).

4.50. Xe L

B isoelectronic sequence
Ground state $1s^2 2s^2 2p\ ^2P^\circ_{1/2}$
Ionization energy 71 780 000 cm^{-1} (8 899 eV) [70CAR]

The ground state of Xe L was determined by means of a calculation using the Cowan codes [81COW]. No wavelengths or energy levels have been reported for this ion except for a few Rydberg transitions between 63 and 122 Å from upper levels with $n=7-12$ observed by Büttner *et al.* [92BUT] in beam–foil studies.

The ionization energy was determined by Carlson *et al.* [70CAR] by means of a calculation based on a simple spherical shell solution for neutral atoms.

References

70CAR T. A. Carlson, C. W. Nestor, Jr., N. Wasserman, and J. D. McDowell, At. Data **2**, 63 (1970).

81COW R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).

92BUT R. Büttner, B. Kraus, K.-H. Schartner, F. Folkmann, P. H. Mokler, and G. Möller, Z. Phys. D **22**, 693 (1992).

4.51. Xe LI

Be isoelectronic sequence
Ground state $1s^2 2s^2\ ^1S_0$
Ionization energy 77 483 400 cm^{-1} (9 606.72 eV) [93CUR]

Theoretical calculations of the $n=2$ and $n=3$ energy levels of 50 times ionized xenon, Xe LI, were carried out by Safronova *et al.* [96SAF], [97SAF]. Where possible, levels were determined directly from the observed classified lines reported below. However, three calculated $n=2$ energy levels from Safronova *et al.* [96SAF] were needed to include the known transitions. These energy levels are indicated with square brackets in the Xe LI energy level table. A number of the $n=3$ levels were determined from these using the classified transitions of Simionovici *et al.* [90SIM]. Safronova *et al.* [97SAF] indicate that there is a great deal of ''arbitrariness'' in the identification of the $n=3$ to $n=2$ transitions. However, they used the identifications suggested by Simionovici *et al.* [90SIM], as do we (except for correcting a misprint by changing a $3d_{1/2}$ designation to $3p_{1/2}$). We use the relativistic notation of Safronova *et al.* [97SAF] in the tables to designate the levels above the ground state. In this notation $p_{1/2}$ is denoted as p^* and $p_{3/2}$ is denoted as p while $d_{3/2}$ is denoted as d^* and $d_{5/2}$ is denoted as d. The uncertainties of the energy levels derived from observed lines are mostly between 6000 and 9000 cm^{-1}. The uncertainties of the first two excited levels in the level table are 2000 and 10 000 cm^{-1}, respectively, and that of the $2p^*3d^*\ J=1$ level is 13 000 cm^{-1}.

Büttner *et al.* [92BUT] reported the one Xe LI resonance line. They used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measure-

ment is 0.2 Å. We use their measured value of this line in the Xe LI line table. A few Rydberg transitions between 61 and 150 Å from upper levels with $n=7-12$ were also reported. Möller *et al.* [91MOL] reported the same Xe LI resonance line. They also used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurement is 0.4 Å.

Simionovici *et al.* [90SIM] reported ten Xe LI lines, one of which was an unclassified blend. It was not included in the table. They used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurements is mostly 0.0004 Å.

Martin *et al.* [88MAR] reported one Xe LI line. They also used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurement is 0.5 Å.

All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe LI levels. Only classifiable lines are included in our compilation. The code E2 in the Xe LI line table indicates that the line results from an electric quadrupole transition.

The ionization energy was determined by Curtis [93CUR] by means of a semiempirical extrapolation along the Be isoelectronic sequence.

References

88MAR S. Martin, J. P. Buchet, M. C. Buchet-Poulizac, A. Denis, J. Désesquelles, M. Druetta, J. P. Grandin, D. Hennecart, X. Husson, and D. Lecler, Nucl. Instrum. Methods B **31**, 79 (1988).

90SIM A. Simionovici, D. D. Dietrich, D. Leneman, and J. P. Grandin, Phys. Rev. A **41**, 5250 (1990).

91MOL G. Möller, E. Träbert, P. H. Heckmann, P. H. Mokler, and A. E. Livingston, Z. Phys. D **18**, 223 (1991).

92BUT R. Büttner, B. Kraus, K.-H. Schartner, F. Folkmann, P. H. Mokler, and G. Möller, Z. Phys. D **22**, 693 (1992).

93CUR L. J. Curtis, Phys. Scr. **48**, 559 (1993).

96SAF M. S. Safronova, W. R. Johnson, and U. I. Safronova, Phys. Rev. A **53**, 4036 (1996).

97SAF M. S. Safronova, W. R. Johnson, and U. I. Safronova, J. Phys. B **30**, 2375 (1997).

Energy levels of Xe LI

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.0	0	$2s^2$	^1S	0	92BUT
1 027 000	1	$2s2p^*$	°	1	92BUT
[3 785 850]	1	$2s2p$	°	2	96SAF
2 433 000	0	$2p^*2p^*$		0	88MAR
[5 147 080]	0	$2p^*2p$		1	96SAF
[5 271 330]	0	$2p^*2p$		2	96SAF
45 137 000	0	$2s3d^*$		2	90SIM
45 355 000	0	$2s3d$		3	90SIM
46 226 000	1	$2p^*3d^*$	°	1	90SIM
46 425 000	1	$2p^*3d$	°	3	90SIM
49 090 000	1	$2p3d^*$	°	2	90SIM
49 147 000	1	$2p3d^*$	°	3	90SIM
49 290 000	1	$2p3d$	°	4	90SIM
47 745 000	1	$2p3s$	°	1	90SIM
48 080 000	0	$2p3p^*$		1	90SIM

Spectral lines of Xe LI

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2.1976	45 504.	E2	$2s2p$	°	2	–	$2p3d$	°	4	0.0004	90SIM
2.2576	44 295.		$2s2p$	°	2	–	$2p3p^*$		1	0.0004	90SIM
2.2671	44 109.		$2s2p^*$	°	1	–	$2s3d^*$		2	0.0004	90SIM
2.2757	43 943.		$2p^*2p$		1	–	$2p3d^*$	°	2	0.0004	90SIM
2.2792	43 875.		$2p^*2p$		2	–	$2p3d^*$	°	3	0.0004	90SIM
2.2835	43 792.		$2p^*2p^*$		0	–	$2p^*3d^*$	°	1	0.0004	90SIM
2.3544	42 474.		$2p^*2p$		2	–	$2p3s$	°	1	0.0005	90SIM
2.4056	41 570.		$2s2p$	°	2	–	$2s3d$		3	0.0004	90SIM
2.4299	41 154.		$2p^*2p$		2	–	$2p^*3d$	°	3	0.0004	90SIM
71.1	1 406.		$2s2p^*$	°	1	–	$2p^*2p^*$		0	0.5	88MAR
97.4	1 027.		$2s^2$	^1S	0	–	$2s2p^*$	°	1	0.2	92BUT

4.52. Xe LII

Li isoelectronic sequence

Ground state $1s^2 2s\ ^2S_{1/2}$

Ionization energy 79 145 152 cm^{-1} (9 812.747 2 eV) [91THE]

The seven energy levels we report for 51 times ionized xenon, Xe LII, were calculated from the classified lines reported below (except that we did not use the one line reported as a blend). The uncertainties of the 0.97×10^6, 3.97×10^6, and $44.5\times10^6\ cm^{-1}$ levels are 70, 5×10^3, and $7\times10^3\ cm^{-1}$, respectively. The uncertainties of the three higher energy levels are $8\times10^3\ cm^{-1}$.

Feili *et al.* [00FEI] reported one Xe LII resonance line. They also reported three other lines (at 299.511±.028, 303.736±.020, and 317.852±.030 Å) which they could not classify and thus are not in the Xe LII line table. They used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurement is 0.007 Å.

Büttner *et al.* [92BUT] reported the two Xe LII resonance lines. They also used beam foil spectroscopy for their measurements. The quoted uncertainties of their wavelength measurements are 0.2 Å for the 103 Å line and 0.05 Å for the 25 Å line. A few Rydberg transitions between 70 and 143 Å from upper levels with $n=7-12$ were also reported.

Simionovici *et al.* [90SIM] reported six Xe LII lines of which one was a blend. This included one resonance line. They also used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurements is about 0.0004 Å.

Martin *et al.* [89MAR] reported two Xe LII resonance lines. They also used beam foil spectroscopy for their measurements. The quoted uncertainties of their wavelength measurements are 0.08 Å for the 103 Å line and 0.03 Å for the 25 Å line.

The priority for inclusion of duplicate lines in the Xe LII line table was [00FEI], [90SIM], [89MAR], then [92BUT]. As a result no [92BUT] lines are in the table. All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe LII levels. Only classifiable lines are included in our compilation. The code "b" in the Xe LII line table indicates that the observed line is a blend.

The ionization energy was determined by Theodosiou *et al.* [91THE] by means of theoretical calculation and semiempirical parameterization along the Li isoelectronic sequence.

References

89MAR S. Martin, J. P. Buchet, M. C. Buchet-Poulizac, A. Denis, J. Désesquelles, M. Druetta, J. P. Grandin, D. Hennecart, X. Husson, and D. Lecler, Europhys. Lett. **10**, 645 (1989).

90SIM A. Simionovici, D. D. Dietrich, D. Leneman, and J. P. Grandin, Phys. Rev. A **41**, 5250 (1990).

91THE C. E. Theodosiou, L. J. Curtis, and M. El-Mekki, Phys. Rev. A **44**, 7144 (1991).

92BUT R. Büttner, B. Kraus, K.-H. Schartner, F. Folkmann, P. H. Mokler, and G. Möller, Z. Phys. D **22**, 693 (1992).

00FEI D. Feili, Ph. Bosselmann, K.-H. Schartner, F. Folkmann, A. E. Livingston, E. Träbert, X. Ma, and P. H. Mokler, Phys. Rev. A **62**, 022501 (2000).

Energy levels of Xe LII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$2s$	^2S	1/2	00FEI
966 420	1	$2p$	$^2P^\circ$	1/2	00FEI
3 971 000	1	$2p$	$^2P^\circ$	3/2	89MAR
44 497 000	0	$3s$	^2S	1/2	90SIM
45 664 000	1	$3p$	$^2P^\circ$	3/2	90SIM
45 744 000	0	$3d$	^2D	3/2	90SIM
46 012 000	0	$3d$	^2D	5/2	90SIM

Spectral lines of Xe LII

Observed vacuum wavelength (Å)	Observed wave number ($10^3\ cm^{-1}$)	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2.189 91	45 664.		$2s$	^2S	1/2	–	$3p$	$^2P^\circ$	3/2	0.00039	90SIM
2.232 87	44 785.	b	$2p$	$^2P^\circ$	1/2	–	$3d$	^2D	3/2	0.00038	90SIM
2.297 32	43 529.		$2p$	$^2P^\circ$	1/2	–	$3s$	^2S	1/2	0.00039	90SIM
2.378 64	42 041.		$2p$	$^2P^\circ$	3/2	–	$3d$	^2D	5/2	0.00036	90SIM
2.393 91	41 773.		$2p$	$^2P^\circ$	3/2	–	$3d$	^2D	3/2	0.00036	90SIM
2.467 47	40 527.		$2p$	$^2P^\circ$	3/2	–	$3s$	^2S	1/2	0.00035	90SIM
25.18	3 971.		$2s$	^2S	1/2	–	$2p$	$^2P^\circ$	3/2	0.03	89MAR
103.475	966.42		$2s$	^2S	1/2	–	$2p$	$^2P^\circ$	1/2	0.007	00FEI

4.53. Xe LIII

He isoelectronic sequence

Ground state $1s^2\ ^1S_0$

Ionization energy 324 821 000 cm^{-1} (40 272.7 eV) [94CHE]

Seven of the eight energy levels we report for 52 times ionized xenon, Xe LIII, in the Xe LIII level table were obtained directly from the relativistic all-order many-body calculations of Plante *et al.* [94PLA]. (We did not use the calculation of Cheng *et al.* [94CHE] because it did not report values for as many levels.) The $1s3d\ ^3D_3$ level was determined by adding to the Plante *et al.* [94PLA] value for the $1s2p\ ^3P_2$ level the MCDF calculated value of Simionovici *et al.* [90SIM] for the difference between the two levels. The uncertainty in the theoretical values is probably of the order of a few hundred cm^{-1}.

Widmann *et al.* [97WID$_a$] reported one Xe LIII resonance line and Widmann *et al.* [97WID$_b$] reported two more. (In both papers the authors only provided a plot of their experimental data which we measured to obtain the wavelength.) They used an EBIT for their measurements. The estimated uncertainty of their wavelength measurement is 0.000 005 Å.

Simionovici *et al.* [90SIM] reported one Xe LIII line. They used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurements is about 0.000 4 Å.

Martin *et al.* [89MAR] reported one Xe LIII line. They also used beam foil spectroscopy for their measurements. The quoted uncertainty of their wavelength measurement is 0.1 Å.

Briand *et al.* [89BRI] reported one of the Xe LIII resonance lines observed by Widmann *et al.* [97WID$_b$] and the one observed by Widmann *et al.* [97WID$_a$]. They used a beam foil technique to almost totally strip the Xe and then used a second foil to add an electron to make Xe LIII for their measurements. The quoted uncertainty of their wavelength measurements is 0.000 05 Å.

The priority for inclusion of duplicate lines in the Xe LIII line table was [97WID$_a$], [97WID$_b$], [89BRI], [90SIM], then [89MAR]. As a result no [89BRI] lines are in the table. All candidate lines are passed through a program to determine if they correspond to a transition between the known Xe LIII levels. Only classifiable lines are included in this compilation. The code "M1" in the Xe LIII line table indicates that the observed line is the result of a magnetic dipole transition.

The ionization energy was determined by Cheng *et al.* [94CHE] by means of a theoretical calculation.

References

89BRI J. P. Briand, P. Indelicato, A. Simionovici, V. San Vicente, D. Liesen, and D. Dietrich, Europhys. Lett. **9**, 225 (1989).

89MAR S. Martin, J. P. Buchet, M. C. Buchet-Poulizac, A. Denis, J. Désesquelles, M. Druetta, J. P. Grandin, D. Hennecart, X. Husson, and D. Lecler, Europhys. Lett. **10**, 645 (1989).

90SIM A. Simionovici, D. D. Dietrich, D. Leneman, and J. P. Grandin, Phys. Rev. A **41**, 5250 (1990).

94CHE K. T. Cheng, M. H. Chen, W. R. Johnson, and J. Sapirstein, Phys. Rev. A **50**, 247 (1994).

94PLA D. R. Plante, W. R. Johnson, and J. Sapirstein, Phys. Rev. A **49**, 3519 (1994).

97WID$_a$ K. Widmann, P. Beiersdorfer, G. V. Brown, J. R. Crespo López Urrutia, V. Decaux, and D. W. Savin, Rev. Sci. Instrum. **68**, 1087 (1997).

97WID$_b$ K. Widmann, P. Beiersdorfer, J. R. Crespo López-Urrutia, and S. R. Elliott, Hyperfine Interact. **108**, 73 (1997).

Energy levels of Xe LIII

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0.	0	$1s^2$	^1S	0	94PLA
[243 004 900]	0	$1s2s$	^3S	1	94PLA
[243 691 200]	0	$1s2s$	^1S	0	94PLA
[243 626 600]	1	$1s2p$	$^3P^\circ$	1	94PLA
[243 674 700]	1	$1s2p$	$^3P^\circ$	0	94PLA
[246 756 600]	1	$1s2p$	$^3P^\circ$	2	94PLA
[247 044 900]	1	$1s2p$	$^1P^\circ$	1	94PLA
[290 413 200]	0	$1s3d$	^3D	3	90SIM

Spectral lines of Xe LIII

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
0.404 774	247 051.		$1s^2$	^1S	0	–	$1s2p$	$^1P^\circ$	1	0.000 005	97WID$_a$
0.410 457	243 631.		$1s^2$	^1S	0	–	$1s2p$	$^3P^\circ$	1	0.000 005	97WID$_b$
0.411 578	242 967.	M1	$1s^2$	^1S	0	–	$1s2s$	^3S	1	0.000 005	97WID$_b$
2.2910	43 649.		$1s2p$	$^3P^\circ$	2	–	$1s3d$	^3D	3	0.000 4	90SIM
26.66	3 751.		$1s2s$	^3S	1	–	$1s2p$	$^3P^\circ$	2	0.10	89MAR

4.54. Xe LIV

H isoelectronic sequence

Ground state $1s\ ^2S_{1/2}$

Ionization energy 333 104 600±600 cm^{-1} (41 299.70 ±0.07 eV) [85JOH]

The four $n=1$ and $n=2$ energy levels we report for 53 times ionized xenon, Xe LIV, in the Xe LIV energy level table were obtained from the relativistic calculations with QED corrections of Johnson and Soff [85JOH]. The $n=3$ levels were obtained from the relativistic calculations with QED corrections of Erickson [77ERI] using only the difference of these levels from the $2p\ ^2P^\circ_{3/2}$ level (for which we used the value of Johnson and Soff [85JOH]). The uncertainties in the theoretical values are about 700 cm^{-1} for the $n=2$ levels and 1000–2000 cm^{-1} for the $n=3$ levels.

Briand *et al.* [89BRI] reported the two Xe LIV resonance lines in the Xe LIV line table. They used a beam–foil technique to totally strip the Xe and then used a second foil to add an electron to make Xe LIV for their measurements. The quoted uncertainty of their wavelength measurements is 0.000 13 Å.

The ionization energy was determined by Johnson and Soff [85JOH] by means of a theoretical calculation.

References

77ERI G. W. Erickson, J. Phys. Chem. Ref. Data **6**, 831 (1977).

85JOH W. R. Johnson and G. Soff, At. Data Nucl. Data Tables **33**, 405 (1985).

89BRI J. P. Briand, P. Indelicato, A. Simionovici, V. San Vicente, D. Liesen, and D. Dietrich, Europhys. Lett. **9**, 225 (1989).

Energy levels of Xe LIV

Energy level (cm^{-1})	Parity	Configuration	Term	J	Source of level
0	0	$1s$	^2S	1/2	85JOH
[248 873 200]	1	$2p$	$^2P^\circ$	1/2	85JOH
[252 320 500]	1	$2p$	$^2P^\circ$	3/2	85JOH
[248 930 800]	0	$2s$	^2S	1/2	85JOH
[296 058 000]	1	$3p$	$^2P^\circ$	1/2	77ERI
[297 082 000]	1	$3p$	$^2P^\circ$	3/2	77ERI
[296 077 000]	0	$3s$	^2S	1/2	77ERI
[297 080 000]	0	$3d$	^2D	3/2	77ERI
[297 396 000]	0	$3d$	^2D	5/2	77ERI

Spectral lines of Xe LIV

Observed vacuum wavelength (Å)	Observed wave number (10^3 cm^{-1})	Intensity and comment	Classification						Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J	Configuration	Term	J		
0.396 39	252 270		$1s$	^2S	1/2	$2p$	$^2P^\circ$	3/2	0.000 13	89BRI
0.401 92	248 810		$1s$	^2S	1/2	$2p$	$^2P^\circ$	1/2	0.000 13	89BRI