

Appendix table 5-62

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Relative prominence of scientific literature, by selected field and region/country/economy: 1995 and 2003

(Relative citation index)

Field, rank, and country/economy	1995	2003	Field, rank, and country/economy	1995	2003
All fields			Clinical medicine		
1 Switzerland	1.189	1.152	1 United States	0.990	1.001
2 United States	1.013	1.026	2 Switzerland	0.955	0.954
3 Netherlands	0.877	0.971	3 Canada	0.834	0.949
4 Denmark	0.835	0.937	4 Netherlands	0.841	0.917
5 United Kingdom	0.830	0.864	5 Finland	0.756	0.861
6 Sweden	0.869	0.860	6 Denmark	0.708	0.834
7 Canada	0.739	0.845	7 United Kingdom	0.796	0.827
8 Finland	0.755	0.826	8 Belgium	0.838	0.820
9 Germany	0.724	0.822	9 Sweden	0.778	0.810
10 Belgium	0.819	0.822	10 Ireland	0.710	0.800
11 Austria	0.747	0.804	11 Austria	0.683	0.772
12 Ireland	0.662	0.764	12 Norway	0.626	0.752
13 France	0.730	0.760	13 Hong Kong	0.524	0.751
14 Israel	0.682	0.742	14 Italy	0.640	0.746
15 EU-15	0.681	0.737	15 France	0.688	0.734
16 Norway	0.624	0.718	16 Germany	0.596	0.721
17 Australia	0.630	0.714	17 EU-15	0.643	0.710
18 Italy	0.632	0.699	18 New Zealand	0.690	0.682
19 Hong Kong	0.438	0.672	19 Austria	0.651	0.658
20 New Zealand	0.566	0.615	20 Israel	0.519	0.635
21 Spain	0.464	0.604	21 Spain	0.513	0.623
22 Japan	0.551	0.575	22 Singapore	0.395	0.567
23 Portugal	0.439	0.514	23 Portugal	na	0.558
24 Singapore	0.422	0.509	24 Hungary	0.500	0.554
25 Hungary	0.443	0.491	25 Japan	0.527	0.553
26 Chile	0.343	0.478	26 South Korea	0.523	0.551
27 Greece	0.327	0.465	27 Greece	0.349	0.500
28 South Korea	0.320	0.439	28 Taiwan	0.447	0.484
29 Thailand	na	0.432	29 Thailand	na	0.484
30 Czech Republic	na	0.417	30 East Asia-4	0.410	0.481
31 Argentina	0.304	0.411	31 Czech Republic	na	0.465
32 Slovenia	na	0.409	32 China	0.308	0.455
33 South Africa	0.325	0.404	33 Poland	0.391	0.451
34 Taiwan	0.321	0.401	34 Mexico	0.393	0.430
35 Mexico	0.349	0.385	35 South Africa	0.334	0.422
36 Poland	0.295	0.360	36 Argentina	0.323	0.406
37 Brazil	0.314	0.359	37 Brazil	0.336	0.392
38 Slovakia	na	0.339	38 Slovenia	na	0.361
39 East Asia-4	0.274	0.335	39 Chile	0.200	0.358
40 Bulgaria	0.166	0.325	40 Egypt	0.220	0.344
41 China	0.218	0.293	41 Saudi Arabia	0.277	0.295
42 India	0.182	0.284	42 Iran	na	0.292
43 Croatia	0.257	0.281	43 Turkey	0.202	0.275
44 Turkey	0.214	0.278	44 India	0.197	0.272
45 Saudi Arabia	0.220	0.256	45 Russia	0.068	0.222

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Relative prominence of scientific literature, by selected field and region/country/economy: 1995 and 2003

(Relative citation index)

Field, rank, and country/economy	1995	2003	Field, rank, and country/economy	1995	2003
Biomedical research			Biology		
1 Switzerland	1.165	1.154	1 Switzerland	1.025	1.264
2 United States	1.140	1.122	2 Netherlands	0.942	1.077
3 United Kingdom	0.857	0.927	3 Sweden	0.942	1.032
4 Israel	0.824	0.859	4 United Kingdom	0.833	1.024
5 Austria	0.848	0.858	5 Denmark	0.871	0.859
6 Germany	0.784	0.849	6 Hong Kong	na	0.841
7 Netherlands	0.721	0.832	7 Israel	0.713	0.837
8 Canada	0.712	0.789	8 France	0.672	0.836
9 Denmark	0.620	0.770	9 United States	0.807	0.821
10 Belgium	0.669	0.732	10 Belgium	0.788	0.815
11 France	0.692	0.731	11 Austria	0.654	0.814
12 EU-15	0.661	0.727	12 Germany	0.714	0.810
13 Sweden	0.702	0.727	13 Finland	0.681	0.810
14 Finland	0.652	0.723	14 Norway	0.740	0.788
15 Singapore	0.576	0.716	15 Estonia	na	0.777
16 Australia	0.583	0.713	16 Philippines	0.470	0.745
17 Ireland	0.568	0.659	17 EU-15	0.621	0.743
18 Norway	0.530	0.654	18 Ireland	0.611	0.738
19 Japan	0.564	0.609	19 Canada	0.676	0.707
20 New Zealand	0.493	0.586	20 Italy	0.584	0.678
21 Italy	0.470	0.557	21 Australia	0.645	0.675
22 Hong Kong	na	0.514	22 New Zealand	0.524	0.638
23 Spain	0.336	0.485	23 Portugal	0.649	0.620
24 Portugal	0.344	0.461	24 Kenya	0.347	0.595
25 Chile	0.282	0.441	25 Spain	0.445	0.594
26 Hungary	0.373	0.409	26 South Korea	0.640	0.570
27 South Korea	0.299	0.396	27 Chile	0.444	0.562
28 Taiwan	0.329	0.370	28 Hungary	0.612	0.558
29 Greece	0.277	0.365	29 Czech Republic	na	0.533
30 Mexico	0.253	0.359	30 South Africa	0.455	0.523
31 South Africa	0.201	0.328	31 Slovakia	na	0.521
32 Poland	0.219	0.327	32 Singapore	0.557	0.518
33 East Asia-4	0.323	0.324	33 Indonesia	na	0.517
34 Czech Republic	na	0.304	34 Colombia	0.483	0.496
35 Argentina	0.229	0.296	35 Malaysia	0.387	0.493
36 Slovenia	na	0.251	36 Thailand	0.512	0.484
37 Brazil	0.185	0.246	37 Greece	0.411	0.465
38 Turkey	na	0.234	38 Argentina	0.361	0.460
39 China	0.259	0.232	39 Japan	0.442	0.456
40 Slovakia	na	0.226	40 Poland	0.372	0.454
41 India	0.100	0.183	41 East Asia-4	0.388	0.427
42 Bulgaria	0.049	0.180	42 Bulgaria	0.247	0.425
43 Russia	0.109	0.158	43 Taiwan	0.287	0.423
44 Ukraine	0.057	0.134	44 Brazil	0.348	0.421

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Relative prominence of scientific literature, by selected field and region/country/economy: 1995 and 2003

(Relative citation index)

Field, rank, and country/economy	1995	2003	Field, rank, and country/economy	1995	2003
Chemistry			Physics		
1 Hong Kong	0.722	1.266	1 Switzerland	1.338	1.304
2 Netherlands	1.017	1.193	2 Denmark	1.232	1.264
3 Switzerland	1.104	1.128	3 United States	1.138	1.097
4 Denmark	1.050	1.127	4 Netherlands	1.060	1.055
5 United States	1.121	1.114	5 Austria	0.852	1.037
6 Israel	0.950	1.045	6 Hong Kong	0.439	1.015
7 Sweden	1.222	1.011	7 New Zealand	0.863	0.979
8 Canada	0.991	1.004	8 Germany	0.950	0.950
9 Ireland	0.819	0.996	9 Israel	0.884	0.877
10 United Kingdom	0.843	0.943	10 United Kingdom	0.819	0.871
11 Belgium	0.744	0.870	11 Sweden	0.834	0.870
12 Germany	0.723	0.846	12 Ireland	0.823	0.861
13 Austria	0.685	0.811	13 Belgium	0.763	0.830
14 France	0.678	0.791	14 France	0.795	0.809
15 Australia	0.803	0.785	15 EU-15	0.778	0.794
16 EU-15	0.693	0.781	16 Canada	0.788	0.783
17 Singapore	0.608	0.759	17 Finland	0.795	0.782
18 New Zealand	0.724	0.754	18 Spain	0.534	0.764
19 Italy	0.710	0.742	19 Norway	0.777	0.764
20 Norway	0.638	0.710	20 Slovenia	0.623	0.688
21 Spain	0.522	0.679	21 Australia	0.627	0.682
22 Finland	0.661	0.671	22 Italy	0.678	0.679
23 Japan	0.596	0.627	23 Portugal	0.594	0.649
24 Greece	0.459	0.600	24 Singapore	0.256	0.633
25 Portugal	0.572	0.570	25 Slovakia	na	0.623
26 South Korea	0.382	0.547	26 Hungary	0.570	0.620
27 Slovenia	0.463	0.539	27 Greece	0.553	0.618
28 Taiwan	0.472	0.537	28 Chile	na	0.612
29 South Africa	0.470	0.486	29 Japan	0.546	0.569
30 Venezuela	0.581	0.483	30 Czech Republic	na	0.567
31 Argentina	0.291	0.481	31 Argentina	0.414	0.495
32 Czech Republic	na	0.479	32 South Korea	0.397	0.489
33 Thailand	na	0.464	33 Bulgaria	0.274	0.487
34 Brazil	0.449	0.442	34 Poland	0.434	0.485
35 Hungary	0.402	0.424	35 Iran	na	0.484
36 Mexico	0.464	0.422	36 Taiwan	0.328	0.467
37 Bulgaria	0.295	0.418	37 India	0.285	0.411
38 East Asia-4	0.377	0.409	38 Brazil	0.412	0.410
39 Slovakia	na	0.405	39 Mexico	0.352	0.403
40 India	0.253	0.373	40 South Africa	0.380	0.378
41 Chile	0.264	0.362	41 Romania	0.325	0.378
42 China	0.314	0.358	42 Lithuania	na	0.363
43 Malaysia	na	0.346	43 East Asia-4	0.256	0.363
44 Poland	0.300	0.344	44 Turkey	0.375	0.344
45 Croatia	0.215	0.334	45 China	0.227	0.329

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Relative prominence of scientific literature, by selected field and region/country/economy: 1995 and 2003

(Relative citation index)

Field, rank, and country/economy	1995	2003	Field, rank, and country/economy	1995	2003
Earth and space sciences			Engineering and technology		
1 Netherlands	0.803	1.000	1 Switzerland	1.013	1.196
2 United States	0.985	0.964	2 Denmark	1.253	1.010
3 Chile	1.038	0.933	3 Netherlands	0.872	0.969
4 Switzerland	1.051	0.928	4 Ireland	0.652	0.918
5 Germany	0.843	0.927	5 United States	0.854	0.898
6 Denmark	0.712	0.857	6 Germany	0.587	0.885
7 United Kingdom	0.808	0.842	7 Hong Kong	0.455	0.869
8 Hong Kong	0.301	0.827	8 Sweden	0.853	0.791
9 Israel	0.534	0.794	9 Austria	0.638	0.755
10 Sweden	0.693	0.765	10 New Zealand	0.494	0.751
11 France	0.728	0.746	11 Belgium	0.711	0.745
12 Italy	0.638	0.735	12 Australia	0.712	0.738
13 Belgium	0.664	0.725	13 Norway	0.537	0.733
14 EU-15	0.659	0.723	14 Czech Republic	na	0.725
15 Austria	0.516	0.696	15 France	0.731	0.722
16 Australia	0.678	0.695	16 Israel	0.615	0.710
17 Canada	0.683	0.659	17 Spain	0.600	0.692
18 Finland	0.490	0.658	18 EU-15	0.598	0.684
19 Norway	0.566	0.632	19 United Kingdom	0.676	0.684
20 Japan	0.538	0.579	20 Portugal	0.514	0.674
21 Spain	0.463	0.578	21 Slovenia	0.540	0.674
22 Mexico	0.460	0.574	22 Canada	0.646	0.672
23 Portugal	0.261	0.557	23 Belarus	0.156	0.638
24 Hungary	0.414	0.553	24 Singapore	0.319	0.626
25 Ireland	0.570	0.545	25 Finland	0.547	0.604
26 Poland	0.402	0.536	26 Argentina	0.431	0.603
27 Brazil	0.343	0.515	27 Italy	0.639	0.599
28 Greece	0.250	0.495	28 South Korea	0.473	0.569
29 Ukraine	0.118	0.477	29 Thailand	na	0.556
30 New Zealand	0.442	0.473	30 Japan	0.524	0.550
31 South Korea	0.250	0.468	31 Brazil	0.427	0.521
32 Croatia	0.280	0.462	32 Greece	0.370	0.518
33 Czech Republic	na	0.454	33 Mexico	0.451	0.504
34 Argentina	0.278	0.447	34 China	0.385	0.501
35 South Africa	0.448	0.419	35 Bulgaria	0.314	0.495
36 Bulgaria	0.128	0.370	36 Taiwan	0.414	0.467
37 China	0.278	0.365	37 Chile	na	0.459
38 Taiwan	0.432	0.362	38 East Asia-4	0.387	0.457
39 East Asia-4	0.270	0.361	39 India	0.348	0.453
40 Venezuela	1.523	0.320	40 Poland	0.409	0.451
41 Singapore	na	0.313	41 South Africa	0.471	0.446
42 Turkey	0.256	0.299	42 Hungary	0.693	0.441
43 India	0.190	0.282	43 Jordan	na	0.436
44 Morocco	na	0.262	44 Iran	na	0.432
45 Russia	0.174	0.260	45 Slovakia	na	0.422

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Relative prominence of scientific literature, by selected field and region/country/economy: 1995 and 2003

(Relative citation index)

Field, rank, and country/economy	1995	2003	Field, rank, and country/economy	1995	2003
Mathematics			Social sciences		
1 Hong Kong	0.772	1.666	1 Switzerland	0.544	0.955
2 Switzerland	1.022	1.035	2 Sweden	0.791	0.903
3 Singapore	0.451	0.948	3 Singapore	0.373	0.842
4 Finland	0.802	0.931	4 United States	0.837	0.812
5 Belgium	0.683	0.918	5 Denmark	0.917	0.767
6 United States	0.874	0.907	6 Hong Kong	0.364	0.709
7 United Kingdom	0.869	0.897	7 United Kingdom	0.534	0.697
8 Denmark	1.759	0.881	8 Chile	na	0.683
9 Sweden	0.773	0.871	9 New Zealand	0.639	0.672
10 Netherlands	0.804	0.861	10 Belgium	0.476	0.667
11 Germany	0.602	0.797	11 Netherlands	0.495	0.662
12 Israel	0.659	0.750	12 Finland	0.587	0.659
13 Portugal	0.310	0.747	13 Italy	0.490	0.641
14 Australia	0.626	0.728	14 Spain	0.546	0.625
15 Austria	0.499	0.706	15 Ireland	0.458	0.622
16 EU-15	0.663	0.690	16 Canada	0.641	0.612
17 France	0.610	0.659	17 South Korea	0.690	0.567
18 Norway	0.975	0.657	18 France	0.308	0.563
19 Canada	0.603	0.645	19 Norway	0.468	0.557
20 New Zealand	0.734	0.643	20 Israel	0.606	0.543
21 Chile	0.354	0.630	21 East Asia-4	0.396	0.543
22 Taiwan	0.596	0.603	22 Mexico	0.535	0.543
23 Greece	0.337	0.592	23 EU-15	0.400	0.536
24 Italy	0.530	0.586	24 Australia	0.462	0.523
25 Czech Republic	0.235	0.578	25 Portugal	0.665	0.520
26 Ireland	0.896	0.550	26 China	0.703	0.509
27 Ukraine	0.344	0.543	27 Hungary	0.520	0.487
28 Bulgaria	0.406	0.533	28 Austria	0.372	0.485
29 Venezuela	0.447	0.507	29 Taiwan	0.278	0.480
30 Romania	0.405	0.495	30 Germany	0.241	0.439
31 Slovenia	na	0.481	31 South Africa	0.284	0.401
32 Brazil	0.777	0.475	32 Greece	0.469	0.386
33 Slovakia	na	0.474	33 Brazil	0.386	0.320
34 Argentina	0.466	0.474	34 Argentina	0.145	0.317
35 Spain	0.457	0.465	35 Japan	0.291	0.309
36 Hungary	0.323	0.459	36 Poland	0.399	0.292
37 Poland	0.339	0.439	37 Turkey	0.342	0.263
38 East Asia-4	0.362	0.434	38 India	0.135	0.259
39 South Africa	0.585	0.433	39 Nigeria	0.243	0.233
40 India	0.334	0.401	40 Slovenia	na	0.213
41 Japan	0.584	0.393	41 Croatia	0.209	0.119
42 Mexico	0.221	0.392	42 Ukraine	na	0.112
43 China	0.298	0.386	43 Czech Republic	na	0.104
44 Egypt	0.351	0.373	44 Russia	0.116	0.094
45 Lithuania	na	0.370	45 Slovakia	na	0.035

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Relative prominence of scientific literature, by selected field and region/country/economy: 1995 and 2003

(Relative citation index)

Field, rank, and country/economy	1995	2003	Field, rank, and country/economy	1995	2003
Psychology			Psychology (continued)		
1 Canada	0.830	0.847	21 Austria.....	0.644	0.554
2 United Kingdom.....	0.728	0.819	22 Norway.....	0.606	0.534
3 United States	0.747	0.773	23 Germany	0.360	0.516
4 Netherlands	0.727	0.752	24 Spain.....	0.319	0.512
5 Belgium	0.520	0.732	25 China.....	na	0.501
6 Hungary.....	0.470	0.705	26 East Asia-4.....	0.323	0.436
7 Italy.....	0.591	0.694	27 Brazil.....	0.679	0.433
8 Sweden.....	0.691	0.694	28 Poland.....	0.312	0.401
9 Israel.....	0.515	0.676	29 Portugal.....	na	0.399
10 Finland.....	0.621	0.670	30 India.....	0.172	0.380
11 New Zealand.....	0.607	0.647	31 Japan.....	0.230	0.349
12 Australia	0.591	0.645	32 Turkey.....	na	0.332
13 Switzerland.....	0.637	0.643	33 Singapore.....	na	0.299
14 France	0.478	0.638	34 Greece	na	0.288
15 South Korea	na	0.634	35 Taiwan	0.416	0.286
16 EU-15	0.491	0.601	36 Mexico	0.251	0.267
17 Denmark.....	0.513	0.585	37 South Africa.....	0.283	0.261
18 Argentina	0.302	0.571	38 Czech Republic.....	na	0.207
19 Hong Kong	0.261	0.567	39 Russia.....	0.104	0.085
20 Ireland	0.283	0.563	40 Slovakia	na	0.056

na = not applicable

EU = European Union

NOTES: Relative prominence of scientific literature measured on basis of relative citation index of country/economy, i.e., country/economy's share of cited literature adjusted for its share of published literature. Country/economy's citation of own literature excluded. Index of 1.00 indicates country/economy's share of cited literature equals its world share of scientific literature. Index >1.00 or <1.00 indicates country/economy cited relatively more/less than indicated by its share of scientific literature. Countries/economies with share of world publications in cited field <0.10% during period either excluded or na. Citations on fractional-count basis, i.e., for cited articles with collaborating institutions from multiple countries/economies, each country/economy receives fractional credit on basis of proportion of its participating institutions. EU-15 consists of 15 EU countries before expansion of member countries on May 1, 2004. East Asia-4 consists of China (including Hong Kong), Singapore, South Korea, and Taiwan.

SOURCES: Thomson ISI, *Science Citation Index* and *Social Sciences Citation Index*, <http://www.isinet.com/products/citation/>; iplQ, Inc.; and National Science Foundation, Division of Science Resources Statistics, special tabulations.