



# An Introduction to Nuclear Science References

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# The NSR Database

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- An exhaustive Searchable Nuclear Physics Bibliography database with over 191,000 references.
- References are classified in two categories:
  - **Primary:** Journal Articles.
  - **Secondary:** Conference Proceedings, Preprints, Lab reports, Theses, and Private Communications.
- Over 60 journals are scanned regularly for newly published primary references. Secondary references are added on need and relevancy basis.
- Author and title search allowed for all articles.
- Relevant (low to intermediate energy Nuclear Physics) references are attached a keyword abstract that is indexed to make keyword searching possible. The keyword abstract also gives a brief description of the article.

# Database Organization

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Keyworded References are indexed into Seven Topic Areas

- **Nuclear Reactions:** Nuclear properties, cross sections measurements, reaction calculations.
- **Nuclear Structure:** Exclusively theoretical nuclear structure articles.
- **Radioactivity:**  $\beta$ ,  $2\beta$ ,  $\alpha$ -decays, Delayed Particle emission, IT, SF etc.
- **Atomic Physics:** Electron, photon induced reactions, X-ray emission.
- **Nuclear Moments:** Hyperfine structure, isotope shift etc.
- **Atomic Masses:** Measurements of atomic masses.
- **Compilations:** Evaluations of Nuclear Data, e.g., NDS, ADNDT articles.

# Database Organization Continued

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Other indexing include:

- **Subject:** Measured, Deduced, or Calculated properties.
- **Nuclide:** Target, Parent, and Daughter.
- **Reaction:** Incident and Outgoing
- **A and Z range.**
- **Coden:** Library of Congress Journal Abbreviation.

# User Support

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- Copies of secondary references (kept in NNDC Library) can be made available to users.
- Users can also request specific references to be included in NSR.
- Help us optimize the use of our limited resources by following few simple rules and by having reasonable expectations:
  - All queries and requests **must** be sent to [nsr@bnl.gov](mailto:nsr@bnl.gov).
  - Make sure it is not a user error before contacting NSR.

# NSR Facts – 10/2006 - 09/2007

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- 4,396 (3,862 primary) references added.
- 2,870 (2,417 primary) of them with keyword abstracts.
- 190,930 (140,017 primary) total references.
- 164,592 (114,880 primary) of them with keyword abstracts.
- 152,982 web queries.
- Recent References published on the web site every quarter, and cumulative at the end of the year.