



## Keyword Abstracts

Authors of papers to be published in *Physical Review C* may, if they wish, submit suggested keyword abstracts to the National Nuclear Data Center (NNDC) at Brookhaven National Laboratory for inclusion in the Nuclear Science References (NSR) database.

### Why Keywords?

Keywords inform the reader of the results reported in an article and what the authors have concluded from these results. Keywords are used to build subject indexes, which allow users to search for articles of interest.

### Accessibility

The NSR database is maintained by the NNDC. Free access to the database is available via the World Wide Web and via telnet. References retrieved via the web include links to the online edition of *Physical Review*, where appropriate.

### Preparing and sending keywords

Keywords should be submitted via email:

To: [NSR@BNL.GOV](mailto:NSR@BNL.GOV)  
Subject: PRC Keyword Abstract

Keywords should be received before the print publication of the article in order for the database to be updated in a timely fashion. Include the first author's name and the *full* title of the paper as it will appear in the journal.

If email is not available, submissions via regular mail may be sent to

NSR  
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Brookhaven National Laboratory  
P.O. Box 5000  
Upton, NY 11973-5000 USA

Keywords should be in the form used in NSR. Examples are provided on the reverse side of this page. Please try to indicate as clearly and completely as possible the measured, calculated, deduced, and/or analyzed quantities so that your results can be readily retrieved from the database.

Additional examples can be found by accessing the NSR database at <http://www.nndc.bnl.gov/>.

Questions regarding the NSR database and keywording should be directed to one of the addresses given above.

**Examples:**

Following are a few examples of NSR entries created for recent *Physical Review C* articles. When submitting entries via email, spell out the names of greek symbols. All entries will be edited at the NNDC, so it is not necessary that the contributed keywords have exactly the right format. However, please proofread your entries carefully to avoid typographical errors which may lead to misinterpretation of the intended keywords.

Note that papers dealing with the development of theoretical formalism, with no mention of specific nuclei or reactions, are typically entered into NSR without keyword abstracts.

RADIOACTIVITY  $^{167,168}\text{Tb}(\beta^-)$  [from  $^{238}\text{U}(p, F)$ ]; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\beta\gamma$ -coin,  $T_{1/2}$ .  $^{167,168}\text{Dy}$  deduced levels,  $J$ ,  $\pi$ , configurations, rotational band features. Comparisons with neighboring nuclides.

NUCLEAR REACTIONS  $^{12}\text{C}(\text{polarized } ^6\text{Li}, d)$ ,  $E=50$  MeV; measured  $\sigma(\theta)$ , analyzing powers  $iT_{11}$ ,  $T_{20}$ ,  $T_{21}$ ,  $T_{22}$ ; deduced spin-orbit forces, spectroscopic factors. Finite-range DWBA calculations.

NUCLEAR REACTIONS  $^{124}\text{Sn}(^{36}\text{S}, 3np)$ ,  $(^{36}\text{S}, 5np)$ ,  $E=160, 175$  MeV; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin.  $^{154,156}\text{Tb}$  deduced high-spin levels,  $J$ ,  $\pi$ , configurations. Gammasphere array.

NUCLEAR REACTIONS  $\text{Pb}(^{197}\text{Au}, X)$ ,  $E$  at 11.6 GeV/c/nucleon; measured neutral strangelet production  $\sigma$  upper limit.

NUCLEAR STRUCTURE  $^{65,67}\text{Ga}$ ; calculated levels,  $J$ ,  $\pi$ ,  $B(E2)$ ,  $B(M1)$ . Interacting boson-fermion plus interacting pair model.

NUCLEAR STRUCTURE  $^{108,110,112,114}\text{Pd}$ ; calculated levels,  $J$ ,  $\pi$ , quadrupole moments, deformation,  $B(E2)$ ; deduced octupole-octupole interaction contribution. Cranked Hartree-Bogoliubov calculations.

NUCLEAR MOMENTS  $^{136,138,140,142,144}\text{Ce}$ ; measured isotope shifts; deduced mean square charge radii, quadrupole deformation. Collinear laser-ion-beam spectroscopy.