Manuscripts that report the results of research in nuclear physics and related fields may be submitted to Physical Review C. The manuscripts must contain new results and not be in editorial process at another journal. (For details, see “Physical Review C Editorial Policies and Practices” in this issue.)

Articles published in Physical Review C are grouped under headings in the table of contents. The headings now used are as follows:

- Nucleon-Nucleon Interaction, Few-Body Systems
- Nuclear Structure
- Nuclear Reactions
- Relativistic Nuclear Collisions
- Hadronic Physics and QCD
- Electroweak Interaction, Symmetries
- Nuclear Astrophysics

Authors should suggest the headings that are most appropriate.

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Manuscripts sent by conventional mail should be submitted to the Editor, Physical Review C, 1 Research Road, Box 9000, Ridge, New York 11961-9000. Manuscripts should be double-spaced, on one side of the paper only (about 6 mm of space between lines) with ample margins, on white letter-sized paper. Poor copies and unclear or excessive handwritten inserts are not acceptable.

Normally, manuscripts and figures are not returned to authors. Authors should indicate (preferably on initial submittal) if they want hard copies of the manuscript and/or figures returned (e.g., when correspondence is sent to the authors during the editorial process, and/or after a final decision has been made).

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The Division of Nuclear Physics of the APS requests that authors provide a Keyword Abstract. Please consult http://www.nndc.bnl.gov/nndc/physrev_keywords/ for further information and submission details. The Keyword Abstract should be forwarded to the National Nuclear Data Center.

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The names of authors may be listed in any order in the byline at the beginning of a paper. The author who submits the paper is responsible for ensuring that all coauthors have approved the paper and for checking that the form of each name (e.g., initials versus full names) is normally used by the author.

Affiliations of authors should be given without abbreviation. (Use Massachusetts Institute of Technology, not MIT.) Give the city, state, and zip code for U.S. addresses; add the country for other addresses. Affiliations must be institutions, not conferences, collaborations, or temporary meeting places.

If the authors are at different institutions, they may be grouped by institution with the name of the institution following each name. If the authors are not grouped by institution, the names of institutions may be repeated following the appropriate authors or groups of authors. If this becomes cumbersome, the names of institutions may be listed following the list of authors. Each author’s name should then be followed by a superscript number (or numbers) that refers to a similar superscript number preceding the appropriate institution (or institutions). Normally, the most concise presentation is preferred.

Footnotes to an author’s name or address are intended to facilitate locating or communicating with an author. In many cases, it can be helpful to identify an author as “spokesperson” or “author to whom correspondence should be addressed.” Footnotes giving email addresses of one or more corresponding authors are strongly encouraged. All information concerning research support should appear in the acknowledgments. Footnotes which describe an author’s position or title are not acceptable.

Every paper must have an abstract. It should be about 5% of the length of the article, but less than 500 words. It should state all subjects about which new information is given and the conclusions and results. For experimental papers it should specify clearly what quantities were measured, what nuclides were studied at what energies. It should not contain footnotes, coined words, or acronyms that are not explained.

Physical Review C tries to follow the recommendations on symbols and units of the International Union of Pure and Applied Physics (IUPAP) and of the National Institute of Standards and Technology. Metric units (preferably SI), not British units, are used, unless the British unit is part of the name of an object.

Recommended abbreviations for frequently used terms are listed below along with some common misuse.

<table>
<thead>
<tr>
<th>Use</th>
<th>Do Not Use</th>
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<tr>
<td>µm</td>
<td>µ</td>
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<tr>
<td>nm</td>
<td>mµ</td>
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<tr>
<td>fm</td>
<td>F (F is for farad)</td>
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<tr>
<td>g</td>
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<td>A</td>
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<td>K</td>
<td>°K</td>
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<tr>
<td>sr</td>
<td>Sr, ster, str</td>
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<tr>
<td>u</td>
<td>amu</td>
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<tr>
<td>cm³</td>
<td>cc</td>
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<tr>
<td>deg</td>
<td>DEG, DEG., deg.</td>
</tr>
<tr>
<td>keV</td>
<td>KEV, KeV</td>
</tr>
<tr>
<td>MeV</td>
<td>MeV, MEV</td>
</tr>
<tr>
<td>MeV/nucleon</td>
<td>MeV/u, MeV/amu, MeV/A</td>
</tr>
<tr>
<td>µ, N</td>
<td>n.m.</td>
</tr>
<tr>
<td>c.m. (=center of mass)</td>
<td>CM</td>
</tr>
<tr>
<td>arb. units</td>
<td>a.u. (a.u. is for atomic units)</td>
</tr>
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</table>

Physical Review C follows the recommendations of the S.U.N. Commission of IUPAP on the symbols to be used for nuclides and their states. The nuclide number (mass number) of a nuclide is shown as a left superscript (\(^{14}\text{N}\)). A right superscript is used for indicating a state of ionization (Ca\(^{2+}\)) or an excited state (\(^{109}\text{Ag}^{m,14}\text{N}\)). A right subscript is used for indicating the number of atoms in a molecule (\(^{14}\text{N}_2\)). For bombarding particles, \(n, p, d, t, h,\) and \(\alpha\) may be used, but
not \( \tau \). For other bombarding particles, only the usual symbols \(^6\text{Li}, \, ^{12}\text{C}, \ldots\) should be used. For target nuclides, use \(^1\text{H}, \, ^2\text{H}, \, ^3\text{H}, \, ^3\text{He}, \, ^4\text{He}, \ldots\). Do not use \(D, \, T, \ldots\).

The preferred notation for a differential cross section is \(\sigma(\theta)\), \(\sigma(E, \theta)\), i.e., the angle or energy should be shown as an argument. The derivative notation \(d\sigma/d\Omega \, dE\) is acceptable; \(d^2\sigma\) by itself or \(d\sigma/d\Omega\, dE\) is not. The notation \(dM/dA\) or \(ds/dZ\) is acceptable when it refers to a mathematical relationship, such as the semiempirical mass formula, but not for the characterization of data, since \(A\) and \(Z\) are not continuous.

Notation should be clear, compact, and consistent with standard usage. Equations should be neatly formatted, punctuated, and aligned to bring out their structure, and numbered on the right. (a) Diacritical marks (tildes, etc.) can be put over any symbol, including indices. (b) Three-vectors are generally set in roman boldface type. More general vectors, matrices, etc., are usually set in lightface italic type, although boldface may alternatively be used. (c) Be careful when using the solidus (/) in fractions. For example, \(1/2a\) means \(1/(2a)\), not \((1/2)a\). Use appropriate bracketing if needed to ensure clarity.

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\(\text{(in press)}\) means that the paper has been accepted for publication in a journal (or a conference proceedings). The name of the journal must be specified. If the paper has been published when the author receives the proofs, the reference should be updated in proof.

(submitted or to be submitted) means that the paper has been submitted or will shortly be submitted for publication. The name of the journal, book, or conference proceedings must be specified.

(unpublished) means that the information is unavailable in formally published form. Ph.D. theses need not be marked (unpublished), since copies can be purchased.

Conference Proceedings. Name, place, and year of the conference should be specified. Specify the editors and publisher if possible. Give page number.

Preprints and Reports (electronic or hard copy). Give name of laboratory, preprint or report number, and year. Give the title if possible and especially if a preprint or report number is not available.


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References to papers published in peer-reviewed journals are considered primary references. References to e-print archives should not be used in place of primary references.

It is important to confirm the accuracy of bibliographic information in references. This has become more important now that the journal is online; establishing functional hyperlinks from reference lists to bibliographic and document databases depends on the accuracy of the data contained in the anchor reference. Since at the present time such links work only from the reference section, work cited anywhere in the paper, including in figure and table captions and in “Note(s) added,” should be included in the reference section.

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An example of data should be presented (such as an energy distribution, time-of-flight spectrum, or coincidence spectrum) to show the quality of the data. If results depend on theoretical assumptions, state what the assumptions are. If the measurement is relative to a standard, such as an energy or cross section, state what reference value was used. If results depend on a sign convention, state the convention and give references.

Specify uncertainties. Distinguish statistical and other errors. In the case of measurements relative to a standard, state whether the error includes the error in the standard.