TETRAHEDRON
The International Journal for the Rapid Publication of Full Original Research Papers and Critical Reviews in Organic Chemistry

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

- Description p.1
- Audience p.1
- Impact Factor p.1
- Abstracting and Indexing p.2
- Editorial Board p.2
- Guide for Authors p.4

DESCRIPTION

*Tetrahedron* publishes experimental and theoretical research results of outstanding significance and timeliness in the field of organic chemistry and its application to related disciplines especially bio-organic chemistry. Areas covered by the journal include the many facets of organic synthesis, organic reactions, natural products chemistry, studies of reaction mechanism and various aspects of spectroscopy. Contributions take the form of full papers, which are major original contributions to the literature. *Tetrahedron* also publishes specially commissioned review articles - Tetrahedron Reports - and collections of original papers - Tetrahedron Symposia-in-Print.

Comments and Proposals: Elsevier also publishes books in this area. If you have a suggestion for a book topic or would like to submit a book proposal, please contact us at: chemistry@elsevier.com

Benefits to authors

We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our author services.

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our support pages: http://support.elsevier.com

AUDIENCE

Organic Chemists, Bio-organic Chemists.

IMPACT FACTOR

2014: 2.641 © Thomson Reuters Journal Citation Reports 2015
ABSTRACTING AND INDEXING

AGRICOLA
BIOSIS
Beilstein Database
Chemical Abstracts
Current Contents Search
Current Contents/Physics, Chemical, & Earth Sciences
MEDLINE®
Derwent Drug File
EI Compendex Plus
Pascal
Research Alert
Science Citation Index
Scisearch
Excerpta Medica
CAB Abstracts
Current Contents (Life Sciences, Clinical Medicine)
Scopus

EDITORIAL BOARD

Editors
L. Ghosez, Institut Européen de Chimie et de Biologie (IECB), Pessac, France
G.-Q. Lin, Shanghai Inst. of Organic Chemistry, Chinese Academy of Sciences (CAS), 345 Lingling Road, 200032 Shanghai, China
S.F. Martin, University of Texas at Austin, Austin, Texas, USA
G.P. Pandey, Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGI), Lucknow, India
R.J.K. Taylor, University of York, York, UK
K. Tomioka, Doshisha Women's College of Liberal Arts, Kyoto, Japan

Reports Editors
M. Christmann, Freie Universität Berlin, Berlin, Germany
J. Hu, Chinese Academy of Sciences (CAS), Shanghai, China
M. Kitamura, Nagoya University, Nagoya, Japan
B.M. Stoltz, California Institute of Technology, Pasadena, California, USA

Chairman
S.F. Martin, University of Texas at Austin, Austin, Texas, USA

Board of Consulting Editors
M. Banwell, Australian National University, Canberra, Australian Capital Territory, Australia
J. Bode, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich, Switzerland
C. Bolm, RWTH Aachen University (RWTH), Aachen, Germany
S. Buchwald, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA
E. Carreira, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich, Switzerland
S. Chandrasekaran, Indian Institute of Science, Bangalore, India
E.J. Corey, Harvard University, Cambridge, Massachusetts, USA
J. Cossy, Centre National de la Recherche Scientifique (CNRS), Paris, France
D.P. Curran, University of Pittsburgh, Pittsburgh, Pennsylvania, USA
S. Denmark, University of Illinois at Urbana-Champaign, Urbana-Champaign, Illinois, USA
K. Ding, Chinese Academy of Sciences (CAS), Shanghai, China
A.M. Echavarren, Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain
G.C. Fu, California Institute of Technology, Pasadena, California, USA
R. Hong, Shanghai Institute of Organic chemistry, Shanghai, China
M. Inoue, The University of Tokyo, Tokyo, Japan
K. Itami, Nagoya University, Nagoya, Japan
P. Knochel, Ludwig-Maximilians-Universität München (LMU), München, Germany
M. Krische, University of Texas, Austin, Texas, USA
E. Lee, Seoul National University (SNU), Seoul, South Korea
S. Ley, University of Cambridge, Cambridge, UK
T-Y. Luh, Academia Sinica, Taipei City, Taiwan, ROC
D. Ma, Shanghai Institute of Organic chemistry, Shanghai, China
GUIDE FOR AUTHORS

INTRODUCTION
Please follow these instructions carefully to ensure that the review and publication of your paper are as swift and efficient as possible. These notes may be copied freely.

Tetrahedron seeks to publish experimental or theoretical research results of outstanding significance and timeliness in the field of Organic Chemistry, Bioorganic Chemistry and related disciplines. Publications may be in the form of Articles, Reports, or Symposia-in-Print.

The contents of papers are the sole responsibility of the authors, and publication shall not imply the concurrence of the Editors or Publisher.

ARTICLES should describe original research in organic chemistry of high quality and timeliness. Because of restrictions on the size of the journal, priority will be given to those contributions describing scientific work having as broad appeal as possible to the diverse readership. We ask referees to help in the selection of articles which have this breadth and suggest that papers covering narrower aspects of the field be sent to journals specializing in those areas. It is strongly recommended that articles be written in English.

REPORTS are specially commissioned reviews of research results of topical importance. Such articles, published only in English, are commissioned in appropriate fields by the Editors of Tetrahedron Reports.

SYMPOSIA-IN-PRINT comprise collections of original research papers (including experimental sections) covering timely areas of organic chemistry. Topics for forthcoming Symposia are announced in the journal from time to time. A Guest Editor will invite authors active in the field to submit papers which are then reviewed and processed for publication by the Guest Editor under the usual refereeing system. Opportunity is also provided for other active investigators to submit contributions. These Symposia are published in English.

BEFORE YOU BEGIN

Ethics in publishing
For information on Ethics in publishing and Ethical guidelines for journal publication see https://www.elsevier.com/publishingethics and https://www.elsevier.com/journal-authors/ethics.

Conflict of interest
All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also https://www.elsevier.com/conflictofinterest. Further information and an example of a Conflict of Interest form can be found at: http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see https://www.elsevier.com/sharingpolicy), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service CrossCheck https://www.elsevier.com/editors/plagdetect.

Changes to authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason
for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

Copyright
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (for more information on this and copyright, see https://www.elsevier.com/copyright). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations (please consult https://www.elsevier.com/permissions). If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases: please consult https://www.elsevier.com/permissions.

For open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (for more information see https://www.elsevier.com/OAauthoragreement). Permitted third party reuse of open access articles is determined by the author's choice of user license (see https://www.elsevier.com/openaccesslicenses).

Author rights
As an author you (or your employer or institution) have certain rights to reuse your work. For more information see https://www.elsevier.com/copyright.

Role of the funding source
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Funding body agreements and policies
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder’s open access policies. Some authors may also be reimbursed for associated publication fees. To learn more about existing agreements please visit https://www.elsevier.com/fundingbodies.

Open access
This journal offers authors a choice in publishing their research:

Open access
- Articles are freely available to both subscribers and the wider public with permitted reuse
- An open access publication fee is payable by authors or on their behalf e.g. by their research funder or institution

Subscription
- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs (https://www.elsevier.com/access).
- No open access publication fee payable by authors.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

For open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:
Creative Commons Attribution (CC BY)
Lets others distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include in a collective work (such as an anthology), text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)
For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The open access publication fee for this journal is USD 2150, excluding taxes. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.

Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our green open access page for further information (http://elsevier.com/greenopenaccess). Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form.

This journal has an embargo period of 24 months.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop (http://webshop.elsevier.com/languageediting/) or visit our customer support site (http://support.elsevier.com) for more information.

Articles must be written in clear, concise, grammatical english. Any author who is not fluent in idiomatic English is urged to gain assistance with manuscript preparation. Reviewers are not expected to correct grammatical errors and any deficiency in this area may detract from the scientific content of the paper.

Manuscript submission
Articles: Authors should submit their manuscripts to the appropriate regional editor (see below) via the online submission page of this journal at http://ees.elsevier.com/tet. Authors will be guided stepwise through the creation and uploading of the various files. The system automatically converts source files to a single Adobe Acrobat PDF version of the article, which is used in the peer review process. Please note that even though manuscript source files are converted to PDF at submission for the review process, these source files are needed for further processing after acceptance. All correspondence, including notification of the editor's decision and requests for revision, takes place by e-mail and via the author's home page. A printed copy of the manuscript is not required at any stage of the process.

The following items should be submitted to the appropriate regional editor via the online submission page:

- **Manuscript.** You are strongly advised to embed the tables/figures/schemes in the relevant position in the manuscript file if possible. This will greatly assist the editorial-review process. Graphic files can also be submitted as separate, highresolution artwork files but please ensure to embed them in the manuscript file also. Please number all manuscript pages consecutively.
- **Graphical abstract** for the contents list (submitted as a separate document).
- **Cover letter:** highlighting the novelty, significance, and urgency of the submitted work, which merits rapid publication and providing details of other relevant information, e.g., submitted or in press manuscripts.
- **List of potential referees** (Separate document).
- **Mol files (optional):** see below.
Templates are provided in order to allow authors to view their paper in a style close to the final printed form. **Their use is optional.** The templates can be found at [http://www.elsevier.com/tetrahedron-templates](http://www.elsevier.com/tetrahedron-templates).

All manuscripts will be fully typeset from the author's electronic files. It should be noted that due to defined typesetting standards and the complex requirements of electronic publishing, the Publisher will not always be able to exactly match the layout the author has submitted. In particular, in the finished journal article, figures and tables are usually placed at the top or bottom of pages. The template is only intended to be used in assisting with the preparation and submission of manuscripts. It should be noted that the use of the journal template is not a requirement and its adoption will neither speed nor delay publication. Elsevier can handle most major word processing packages and in general most formatting applied by authors for style and layout is replaced when the article is being typeset.

These templates contain a large number of macros. To ensure successful PDF conversion by the online submission system, it is important that the author saves a new document based on the template, rather than saving the template itself. To use the template, the author should save the final document as a Word file with a ".doc" extension (rather than the ".dot" extension). Please use TrueType fonts in order to avoid problems with the creation of the PDF.

Please ensure that the graphical abstract is included as page 1 of your manuscript when submitting online. For further instructions on the preparation of electronic artwork please see [http://www.elsevier.com/artworkinstructions](http://www.elsevier.com/artworkinstructions).

Manuscripts should be addressed to the appropriate regional editor:

**Articles from Austria, Belgium, France, Germany, Portugal, Spain and Switzerland:**
Professor L. Ghosez, Institut Européen de Chimie et de Biologie (IECB), 2, rue Robert Escarpit, 33607 Pessac Cedex, France.

**China:**
Professor Lin Guo-Qiang, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, China.

**India:**
Professor G.P Pandey, Centre of Biomedical Research, SGPGI, Raebareli Road, 226014, Lucknow, India.

**Japan and South Korea:**
Professor K. Tomioka, Kyoto University, Department of Synthetic Medicinal Chemistry, Graduate School of Pharmaceutical Sciences, Yoshida Sakyo-ku, Kyoto 606-8501, Japan.

**The Americas:**
Professor S. F. Martin, Chemistry and Biochemistry Department, The University of Texas, USA.

**All regions other than those specified above:**
Professor R. J. K. Taylor, Department of Chemistry, University of York, UK.

**Tetrahedron Symposia-in-Print:** To the Guest Editor as announced for the particular symposium.

**Tetrahedron Reports:** Reports (except for the Americas) should be submitted to the online submission page of this journal at [http://ees.elsevier.com/tet](http://ees.elsevier.com/tet). When submitting, please select the article type "Report". Your article will then be sent to the Editor for your region:

**Europe and Middle East:** Professor M. Christmann, Freie Universität Berlin, Berlin, Germany

**China, Hong Kong, Macau, South Korea, New Zealand:** Dr J. Hu, Chinese Academy of Sciences (CAS), Shanghai, China

**Japan, Thailand, Taiwan, Singapore, Australia, India:** Professor M. Kitamura, Nagoya University, Nagoya, Japan
For the Americas: Please e-mail your Report, together with a covering letter including the names of 6 potential reviewers to Professor B. Stoltz, stoltz@caltech.edu, Division of Chemistry and Chemical Engineering, California Institute of Technology, USA.

Preparation

General requirements: The corresponding author's full mailing address, including mail codes, phone number, fax number, and e-mail address should be included. Authors are asked to provide four keywords, which will be used for indexing purposes. The manuscript should be compiled in the following order: Graphical Abstract, Title, Authors, Affiliations, Abstract, Keywords, Introduction, Results, Discussion, Conclusion, Experimental, Acknowledgments, References and Notes, Tables, Legends, Figures, and Schemes.

Title: The title should be brief, specific, and rich in informative words; it should not contain any literature references or compound numbers.

Authors and affiliations: Where possible, supply given names, middle initials, and family names for complete identification. Use superscript lowercase letters to indicate different addresses, which should be as detailed as possible and must include the country name. The corresponding author should be indicated with an asterisk, and contact details (fax, e-mail) should be placed in a footnote. Information relating to other authors (e.g., present addresses) should be placed in footnotes indicated by the appropriate symbols (see below).

Abstracts: Authors must include a short abstract of approximately four to six lines that states briefly the purpose of the research, the principal results, and major conclusion(s). References and compound numbers should not be mentioned in the abstract unless full details are given.

Text should be subdivided in the simplest possible way consistent with clarity. Headings and subheadings should reflect the relative importance of the sections, and all headings should be numbered. In the introductory section of the manuscript, the author should strive to define the significance of the work and the justification for its publication. Any background discussion should be brief and restricted to pertinent material. Ensure that all tables, figures, and schemes are cited in the text in numerical order. The preferred position for chemical structures should be indicated. Please ensure that manuscript pages are numbered consecutively. Trade names should have an initial capital letter. All measurements and data should be given in SI units where possible, or in other internationally accepted units. Abbreviations should be used consistently throughout the text, and all non-standard abbreviations should be defined on first usage. Authors are requested to draw attention to hazardous materials or procedures by adding the word CAUTION followed by a brief descriptive phrase and literature references if appropriate.

Reports: When submitting a Tetrahedron report, authors should include biographical information for each author as well as a black-and-white photograph. Each biography should be one paragraph (approximately 150-200 words) and should include date and place of birth, universities attended, degrees obtained, principal professional posts held, present title, a line or two about the major research interests, and anything else professionally relevant that is of special interest. Authors must supply a graphical abstract when the report is first submitted, which will summarise the contents of the report in a concise pictorial form (see provisos section: Manuscript preparation: Graphical Abstracts for more detailed information).

Experimental section: Authors should be as concise as possible in experimental descriptions. The Experimental section must contain all the information necessary to guarantee reproducibility. An introductory paragraph containing information concerning solvents, sources of less common starting materials, special equipment, etc., should be provided. The procedures should be written in the past tense and include the weight, mmol, volume, etc., in parentheses after the names of the substances or solvents. General reaction conditions should be given only once. The title of an experiment should include the chemical name and compound number of the product prepared; subsequently, this compound should be identified by its number. Details of the workup procedure must be included. Physical and spectroscopic data, including NMR, high-resolution mass analysis, and elemental analysis, can be included in the experimental section or presented in tables.

Acknowledgements: An acknowledgement section may be included. It should be placed after the manuscript text and before the references.
**Abbreviations:** Standard ACS abbreviations should be used throughout the manuscript and are employed without periods. The preferred forms for some of the more commonly used abbreviations are mp, bp, °C, K, min, h, mL, μL, g, mg, μg, cm, mm, nm, mol, mmol, μmol, M, mM, μM, ppm, HPLC, TLC, GC, 1H NMR, GC-MS, HRMS, FABHRMS, UV, IR, EPR, ESR, DNase, ED50, ID50, IC50, LD50, im, ip, iv, mRNA, RNase, rRNA, tRNA, cpm, Ci, dpm, V_{max}, K_m, k, t_{1/2}. All non-standard abbreviations should be defined following the first use of the abbreviation. For a detailed listing of standard abbreviations, see The ACS Style Guide; American Chemical Society: Washington, DC, 1997.

**References and notes:** In the text, references should be indicated by superscript Arabic numerals which run consecutively through the paper and appear after any punctuation. Please ensure that all references are cited in the text and vice versa. The reference list should preferably contain only literature references, although other information (e.g., experimental details) can be placed in this section. Preferably, each reference should contain only one literature citation. Authors are expected to check the original source reference for accuracy. Journal titles should be abbreviated according to American Chemical Society guidelines (The ACS Style Guide; Dodd, J. S., Ed.; American Chemical Society: Washington DC, 1997). A list of currently accepted journal abbreviations may be found the journal home page at http://www.elsevier.com/locate/tet. Formatting for common references are shown below.

Scientific articles:

Books:

Patent/Chem. abstract:

Meeting abstract:

**Citing and listing of Web references:** As a minimum, the full URL should be given. Any further information, if known (author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

The digital object identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alphanumeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly "Articles in press" because they have not yet received their full bibliographic information. The correct format for citing a DOI is shown as follows (example taken from a document in the journal *Physics Letters B*):


When you use the DOI to create URL hyperlinks to documents on the web, they are guaranteed never to change.

**Footnotes:** Footnotes should appear at the bottom of the appropriate page and be indicated by the following symbols: asterisk, dagger, double dagger, section sign, paragraph, parallels.

**Tables:** All tables should be cited in the text, and numbered in order of appearance with Arabic numerals. All table columns should have a brief explanatory heading and, where appropriate, units of measurement. Vertical lines should not be used. Footnotes to tables should be typed below the table and should be referred to by superscript letters. Each table should have a descriptive heading,
which, together with the individual column headings, should make the table, as nearly as possible, self-explanatory. In setting up tabulations, authors are requested to keep in mind the column widths (8.4 cm and 17.7 cm), and to make the table conform to the limitations of these dimensions.

**Legends:** Legends for figures and schemes should be grouped together separately.

**Artwork:** Figures, schemes, and equations must be cited in the text and numbered in order of appearance with Arabic numerals. Other graphics, such as structures, do not need to be numbered, but please indicate in the text where these are to appear. All graphics (including chemical structures) must be provided at the actual size that they are to appear (single-column width is 8.4 cm, double-column width is 17.7 cm). Please arrange schematics so that they fill the column space (either single or double), so as not to leave a lot of unused white space. Please ensure that all illustrations within a paper are consistent in type, quality, and size. Legends should not be included as part of the graphic; instead all legends should be supplied at the end of the text.

To help authors provide actual size graphics, it is suggested that the following settings be used with CSC ChemDraw and ISIS Draw: font 10 pt Helvetica, chain angle 120°, bond spacing 18% of length, fixed length 10.08 pt (0.354 cm), bold width 1.4 pt (0.049 cm), line width 0.42 pt (0.015 cm), margin width 1.12 pt (0.040 cm), and hash spacing 1.75 pt (0.062 cm). Compound numbers should be in boldface. In order to accurately design schematics to print out at the proper width, the original drawing cannot exceed a column width of 8.4 cm (for single column) and 17.7 cm (for double column). Layout design is facilitated if authors submit their original artwork in the actual size to be published. Please save graphics as an Encapsulated PostScript file (EPS) or a Tagged Image File Format (TIFF), as well as the program the graphic was originally drawn in. For more details on the preparation and submission of artwork, please visit [http://www.elsevier.com/artworkinstructions](http://www.elsevier.com/artworkinstructions).

**Colour:** Colour figures should be supplied in electronic format as JPEG files (minimum 300 dots per inch).

- **In print:** Colour figures may be printed in the journal at no charge to the author, provided that the editor considers the colour necessary to convey scientific information.
- **On the Web:** Any figure can appear free of charge in colour in the Web version of your article (e.g., on ScienceDirect), regardless of whether or not this is reproduced in colour in the printed version. Please note that if you do not opt for colour in print, you should submit relevant figures in both colour (for the Web) and black and white (for print).

**Journal conventions**

**Nomenclature:** It is the responsibility of the authors to provide correct nomenclature. Chemical names for drugs are preferred. If these are not practical, generic names, names approved by the U.S. Adopted Names Council, or those approved by the World Health Organization may be used. If a generic name is used, its chemical name or structure should be provided at the point of first citation. Authors will find the following as useful reference books for recommended nomenclature.


**X-ray crystallographic data:** Prior to submission of the manuscript, the author should deposit crystallographic data for organic and metalorganic structures with the Cambridge Crystallographic Data Centre. The data, without structure factors, should be sent by e-mail to deposit@ccdc.cam.ac.uk, as an ASCII file, preferably in CIF format. Hard copy data should be sent to CCDC, 12 Union Road, Cambridge CB2 1EZ. A checklist of data items for deposition can be obtained from the CCDC Home Page on the World Wide Web ([http://www.ccdc.cam.ac.uk](http://www.ccdc.cam.ac.uk)) or by e-mail to: fileserv@ccdc.cam.ac.uk, with the one-line message, send me checklist. The data will be acknowledged, within three working days, with one CCDC deposition number per structure deposited. These numbers should be included with the following standard text in the manuscript: Crystallographic data (excluding structure factors) for the structures in this paper have been deposited with the Cambridge Crystallographic Data Centre as supplementary publication nos. CCDC. Copies of the data can be obtained, free of charge, on
application to CCDC, 12 Union Road, Cambridge CB2 1EZ, UK, (fax: +44-(0)1223-336033 or e-mail: deposit@ccdc.cam.ac.uk). Deposited data may be accessed by the journal and checked as part of the refereeing process. If data are revised prior to publication, a replacement file should be sent to CCDC.

**Characterization of new compounds:** All new compounds should be fully characterized with relevant spectroscopic data. Microanalyses should be included whenever possible. Under appropriate circumstances, high-resolution mass spectra may serve in lieu of microanalysis, if accompanied by suitable NMR criteria for sample homogeneity.

**DNA sequences and GenBank Accession numbers:** Many Elsevier journals cite "gene accession numbers" in their running text and footnotes. Gene accession numbers refer to genes or DNA sequences about which further information can be found in the databases at the National Center for Biotechnical Information (NCBI) at the National Library of Medicine. Elsevier authors wishing to enable other scientists to use the accession numbers cited in their papers via links to these sources, should type this information in the following manner:

*For each and every* accession number cited in an article, authors should type the accession number in **bold, underlined text**. Letters in the accession number should always be capitalised. (See Example below). This combination of letters and format will enable Elsevier's typesetters to recognise the relevant texts as accession numbers and add the required link to GenBank's sequences.

**Example:** "(GenBank accession nos. AI631510, AI631511, AI632198, and BF223228), a B-cell tumor from a chronic lymphatic leukemia (GenBank accession no. BE675048), and a T-cell lymphoma (GenBank accession no. AA361117")'. Authors are encouraged to check accession numbers used very carefully. **An error in a letter or number can result in a dead link.** In the final version of the **printed article**, the accession number text will not appear bold or underlined. In the final version of the **electronic copy**, the accession number text will be linked to the appropriate source in the NCBI databases enabling readers to go directly to that source from the article.

**Software:** Software used as part of computer-aided drug/agent design (e.g., molecular modelling, QSAR, conformational analysis, molecular dynamics) should be readily available from accepted sources and the authors may specify where the software can be obtained. Assurance of the quality of the parameters employed for the relevant potential functions should be detailed in the manuscript.

**Preparation of supplementary data:** Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, movies, animation sequences, high-resolution images, background datasets, sound clips, and more. Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier web products, including ScienceDirect: [http://www.sciencedirect.com](http://www.sciencedirect.com).

To ensure that your submitted material is directly usable, please provide data in one of our recommended file formats. Supplementary data must be saved in files separate from those for the manuscript and figures, and all file names must be supplied. Supplementary files should either be referred to from within the text of your manuscript in the same way as for figures or tables, or their presence be indicated by adding a paragraph entitled "Supplementary data" at the end of the manuscript, detailing which data are supplied. In addition, authors should also provide a concise and descriptive caption for each file.

When supplying supplementary data, authors must state whether the data files are either (i) for online publication or (ii) to be used as an aid for the refereeing of the paper only. All supplementary data will be subject to peer review. For more detailed instructions, on supplementary data, please visit our artwork instruction pages at [http://www.elsevier.com/artworkinstructions](http://www.elsevier.com/artworkinstructions).

Note that supplementary files are published online exactly as supplied (i.e. the material is not typeset). The typesetter is unable to implement corrections to supplementary files. Should any corrections be necessary, authors should supply revised supplementary files.

**Article structure**

**Subdivision - numbered sections**

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.
Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Theory/calculation
A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

Results
Results should be clear and concise.

Discussion
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Appendices
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Vitae
For Reports only: include in the manuscript a short (maximum 100 words) biography of each author, along with a passport-type photograph accompanying the other figures.

Essential title page information
• Title. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
• Author names and affiliations. Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
• Corresponding author. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.
• Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Graphical abstract
A Graphical abstract is mandatory for this journal. It should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership online. Authors must provide images that clearly represent the work described in the article. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. See https://www.elsevier.com/graphicalabstracts for examples. Authors can make use of Elsevier's Illustration and Enhancement service to ensure the best presentation of their images also in accordance with all technical requirements: Illustration Service.

Keywords
Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.
Electronic artwork

General points

• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the published version.
• Submit each illustration as a separate file.

A detailed guide on electronic artwork is available on our website: https://www.elsevier.com/artworkinstructions.

You are urged to visit this site; some excerpts from the detailed information are given here.

Formats

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS (or PDF): Vector drawings, embed all used fonts.
TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapped line/halftone (color or grayscale), keep to a minimum of 500 dpi.

Please do not:

• Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
• Supply files that are too low in resolution;
• Submit graphics that are disproportionately large for the content.

Figure captions

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

Citation in text

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Video data

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect: http://www.sciencedirect.com.

Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages at https://www.elsevier.com/artworkinstructions. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.
AudioSlides
The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available at https://www.elsevier.com/audioslides. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

Chemical Compound Viewer (Reaxys)
You can enrich your article with visual representations, links and details for those chemical structures that you define as the main chemical compounds described. Please follow the instructions at https://www.elsevier.com/compound-viewer to learn how to do this.

Interactive plots
This journal enables you to show an Interactive Plot with your article by simply submitting a data file. For instructions please go to https://www.elsevier.com/interactiveplots.

Submission checklist
The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:
One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address
All necessary files have been uploaded, and contain:
• Keywords
• All figure captions
• All tables (including title, description, footnotes)
Further considerations
• Manuscript has been ‘spell-checked’ and ‘grammar-checked’
• References are in the correct format for this journal
• All references mentioned in the Reference list are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Internet)
Printed version of figures (if applicable) in color or black-and-white
• Indicate clearly whether or not color or black-and-white in print is required.
For any further information please visit our customer support site at http://support.elsevier.com.

AFTER ACCEPTANCE
Use of the Digital Object Identifier
The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format; here an article in the journal Physics Letters B):
http://dx.doi.org/10.1016/j.physletb.2010.09.059
When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

Proofs
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download Adobe Reader version 9 (or higher) available free from http://get.adobe.com/reader. Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site: http://www.adobe.com/products/reader/tech-specs.html.
If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via e-
mail. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**
The corresponding author, at no cost, will be provided with a personalized link providing 50 days free access to the final published version of the article on ScienceDirect. This link can also be used for sharing via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (http://webshop.elsevier.com/myarticleservices/offprints). Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover (http://webshop.elsevier.com/myarticleservices/booklets).

**AUTHOR INQUIRIES**
You can track your submitted article at https://www.elsevier.com/track-submission. You can track your accepted article at https://www.elsevier.com/trackarticle. You are also welcome to contact Customer Support via http://support.elsevier.com.

© Copyright 2014 Elsevier | http://www.elsevier.com