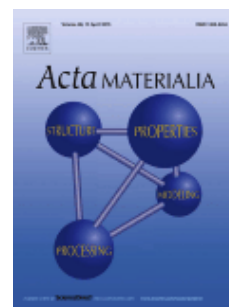




TABLE OF CONTENTS

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



ISSN: 1359-6454

DESCRIPTION

Acta Materialia provides a forum for publishing full-length, original papers and commissioned overviews that advance the in-depth understanding of the relationship between the processing, the structure and the properties of **inorganic materials**. Papers that have a high impact potential are sought. The structure encompasses atomic and molecular arrangements, chemical and electronic structures, and microstructure. Emphasis is on either the **mechanical** or **functional behavior** of **inorganic solids** at all length scales down to nanostructures.

The following aspects of the science and engineering of inorganic materials are of particular interest:

- Cutting-edge experiments and theory as they relate to the understanding of the properties,
- Elucidation of the mechanisms involved in the synthesis and processing of materials specifically as they relate to the understanding of the properties, and
- Characterization of the structure and chemistry of materials specifically as it relates to the understanding of the properties.

Acta Materialia welcomes papers that employ theory and/or simulation (or numerical methods) that substantially advance our understanding of the structure and properties of inorganic materials. Such papers should demonstrate relevance to the materials community by, for example, making a comparison with experimental results (in the literature or in the present study), making testable microstructural or property predictions or elucidating an important phenomenon. Papers that focus primarily on model parameter studies, development of methodology or those employing existing software packages to obtain standard or incremental results are discouraged.

Short communications and comments to papers published in *Acta Materialia* may be [submitted to Scripta Materialia](#).

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

Materials Scientists and Engineers, Applied Physicists and Solid State Chemists

IMPACT FACTOR

2013: 3.940 © Thomson Reuters Journal Citation Reports 2014

ABSTRACTING AND INDEXING

Applied Mechanics Reviews
Cambridge Scientific Abstracts
Chemical Abstracts
Current Contents
Materials Science Citation Index
Metals Abstracts
Engineering Index
INSPEC
PASCAL/CNRS
Scopus

EDITORIAL BOARD

Coordinating Editor

S. Mahajan, Dept. of Chemical Engineering and Materials Science, University of California at Davis, 1 Shields Avenue, Davis, CA 95616, USA, Tel: +1 530 752 5132, Email: actamat@ucdavis.edu
Editorial Assistant: Becky Houston

Editors

I. Beyerlein, Theoretical Div., Los Alamos National Laboratory, T-3 MS B216, Los Alamos, NM 87545, New Mexico, USA,

Editorial Assistant: Julie Brown

G. Gottstein, Inst. für Metallkunde und Metallphysik, RWTH Aachen University (RWTH), Kopernikusstr. 14, D-52056, Aachen, Germany

Editorial Assistant: Norma Gottstein

M. Harmer, Dept. of Materials Science & Engineering, Lehigh University, 27 Memorial Drive West, Bethlehem, PA. 18015, Pennsylvania, USA

Editorial Assistant: Deanne Hoenscheid

S. Jin, Dept. of Materials Science and Engineering, Dept. of Mechanical & Aerospace Engineering & Nanoengineering, University of California at San Diego (UCSD), 9500 Gilman Dr, La Jolla, CA 92093, California, USA

Editorial Assistant: Michael Reiss

R. Kirchheim, Inst. für Materialphysik, Georg-August Universität Göttingen, Friedrich-Hund-Platz. 1, 37077, Göttingen, Germany

Editorial Assistant: Dorothea Kirchheim

U. Ramamurthy, Dept. of Materials Engineering, Indian Institute of Science, C.V. Raman Avenue, 560012, Bangalore, India,

Editorial Assistant: Hema Gurumurthy

J. Rickman, Dept. of Materials Science & Engineering, Lehigh University, 27 Memorial Drive West, Bethlehem, PA. 18015, USA

Editorial Assistant: Deanne Hoenscheid

C.A. Schuh, Dept. of Materials Science and Engineering, Dept. of Biological Engineering, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139, Massachusetts, USA

Associate Editors: Dr. Marc Legros, Professor David Rodney, Professor Angus Wilkinson

R. Wagner, Institut Laue-Langevin, 6 rue Jules Horowitz BP 156, 38042, Grenoble, France

Editorial Assistant: Margrit Wagner

The Board of Governors of Acta Materialia

K.S. Anseth

Governor

E. Cole, Jr.

ASM Governor
A.J. Coury
Board Governor
G. Dehm
Cooperating Society Governor
G. Gray, III
Chair, Treasurer and Board Governor
C. Hansson
Executive Secretary and Cooperating Society Governor
W. Kurz
FEMS Representative Governor
S. Mahajan
Coordinating Editor and Governor
T. Ohji
ASM Governor
G.B. Olson
ASM Governor
M. Singh
ASM Governor
G.W. Warren
TMS Governor

GUIDE FOR AUTHORS

INTRODUCTION

Acta Materialia provides a forum for publishing full-length, original papers and commissioned overviews that advance the in-depth understanding of the relationship between the processing, the structure and the properties of **inorganic materials**. Papers that have a high impact potential and/or substantially advance the field are sought. The structure encompasses atomic and molecular arrangements, chemical and electronic structures, and microstructure. Emphasis is on either the **mechanical** or **functional behavior** of **inorganic solids** at all length scales down to nanostructures.

The following aspects of the science and engineering of inorganic materials are of particular interest:

- (i) Cutting-edge experiments and theory as they relate to the understanding of the properties,
- (ii) Elucidation of the mechanisms involved in the synthesis and processing of materials specifically as they relate to the understanding of the properties, and
- (iii) Characterization of the structure and chemistry of materials specifically as it relates to the understanding of the properties.

Acta Materialia welcomes papers that employ theory and/or simulation (or numerical methods) that substantially advance our understanding of the structure and properties of inorganic materials. Such papers should demonstrate relevance to the materials community by, for example, making a comparison with experimental results (in the literature or in the present study), making testable microstructural or property predictions or elucidating an important phenomenon. Papers that focus primarily on model parameter studies, development of methodology or those employing existing software packages to obtain standard or incremental results are discouraged.

Short communications and comments to papers published in *Acta Materialia* may be [submitted to Scripta Materialia](#).

BEFORE YOU BEGIN

Ethics in publishing

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://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 <http://www.elsevier.com/conflictsofinterest>. Further information and an example of a Conflict of Interest form can be found at: http://help.elsevier.com/app/answers/detail/a_id/286/p/7923.

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 <http://www.elsevier.com/sharingolicy>), 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 <http://www.elsevier.com/editors/plagdetect>.

Changes to authorship

Author names may not be added, deleted or rearranged once the paper has been processed and accepted. Please ensure that the author list is complete and in the proper order when submitting your final version to the processing editor.

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (for more information on this and copyright, see <http://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 <http://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 <http://www.elsevier.com/permissions>.

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. For more information see <http://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 <http://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 (<http://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.

Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)

Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)

The open access publication fee for this journal is **USD 3000**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

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.

Submission

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Submit your article

Please submit your article via <http://ees.elsevier.com/am/>.

Referees

Please submit, with the manuscript, the names, affiliations, and institutional e-mail addresses of 4 potential referees. Please do not list Acta Materialia or Scripta Editors, colleagues from the authors' institutions(s), or colleagues with whom the authors have recently collaborated, due to potential conflict of interest. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

PREPARATION

Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: <http://www.elsevier.com/guidepublication>). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Article structure

General guidelines for online submission:

Elsevier can accept text files in most standard word-processing formats but Microsoft Word is preferred. Alternatively, the initial submission can be in PDF format. Please note, however, that the text file of a revision must be uploaded in an editable format, either Microsoft Word or LaTeX. Graphics should be high-resolution and the preferred formats are either TIFF or JPEG. For further information on the preparation of electronic artwork please refer to the following website: <http://www.elsevier.com/artworkinstructions>.

All online submissions must be accompanied by a covering letter detailing what you are submitting. Please indicate the author to whom correspondence should be addressed (in the case of multiple authors) and include a contact address, telephone/fax numbers for the corresponding author and e-mail addresses for **all** authors. Please include details of any previous or concurrent submissions and also any information that will support your submission (e.g. original or confirmatory data, relevance, topicality). Please indicate if this is a resubmission of a paper previously rejected by an Acta Materialia editor and, if so, provide the manuscript number of the rejected paper along with the name of the processing editor. (Referees are chosen carefully and all editorial decisions are considered final. In the event of rebuttal by the authors, complete statements should be emailed directly to the processing editor. The editor will invite resubmission if he determines that the argument supports it.) Please note that when your manuscript is received at Elsevier it is considered to be in its final form. Therefore

you need to check your manuscript carefully before you submit it online. It is also very important to thoroughly check the system-generated PDF before approving it. If the paper is sent for review, this PDF is what the referee will use.

Length of papers

The pressure for publication space in Acta Materialia is extreme. This situation may require the processing editor to impose a limitation on the length of a paper. Papers are normally be less than 10 printed pages in length; as a rule of thumb, a paper of 20 double-spaced typescript pages, plus a typical number of figures (8 or so) reduces to 10 printed pages. Use double spacing and minimum 1-inch (3 cm) margins, and 12 pt font size standard fonts. Papers which are longer than 25 double-spaced typescript pages may be returned by the processing editor to the authors with a request that they be shortened before being considered further. On the other hand, extremely short papers less than 3300 words will not be processed. Short communications and comments to papers published in Acta Materialia should be submitted to Scripta Materialia.

Pagination

Please ensure that your manuscript is paginated, as this will help both editors and reviewers to process it promptly.

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

Provide a critical assessment of the literature relevant to the problem at hand, delineating unresolved issues. State clear objectives to explain how this study will take the field forward.

Experimental

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

Error bars:

Error bars are required on all experimental and calculated data points with an explanation in the text as to how the errors were determined.

SI Units

SI units should be used throughout.

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

Should develop cogent explanation for the results and explore their significance. In the case of computational studies, results should be compared with information available from published experimental work, if possible.

Conclusions

The main conclusions of the study may be presented in a short Conclusions section, which should stand alone.

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.

Essential title page information

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations, acronyms and formulae where possible.

• **Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. 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. **Author names may not be added after a paper has been accepted.**

• **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be 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.

• It is not necessary to submit the title page as a separate document. However, if this option is chosen, please also include title page information at the beginning of the text document.

Abstract

An abstract is required for all papers. The abstract should indicate the content of the paper, and should describe the main conclusions. An effective abstract is brief and normally less than 200 words. Abstracts should not exceed 250 words. References should be avoided, but if essential, they must be cited in full, without reference to the reference list.

Graphical abstract

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. 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 <http://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 and in accordance with all technical requirements: [Illustration Service](#).

Keywords

Immediately following the Abstract, provide a maximum of 5 keywords which appropriately represent the contents of the paper. The keywords must be selected from the Keywords list in the most recently published issue of the Journal (also available: [Keyword Index](#)); however, authors may provide one keyword (out of the five) which is not listed in the Keywords list.

Abbreviations

Define abbreviations and acronyms when they first appear in the article. Ensure consistency of abbreviations throughout the article.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Math formulae

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork

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:

<http://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/half-tone (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.

Color artwork

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. For further information on the preparation of electronic artwork, please see <http://www.elsevier.com/artworkinstructions>.

Please note: Because of technical complications that can arise by converting color figures to 'gray scale' (for the printed version should you not opt for color in print) please submit in addition usable black and white versions of all the color illustrations.

Figure captions

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. (A separate list of figure captions must be included in the main body of your paper, following the references.) 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.

Tables

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules.

References

All references to other papers, books, etc., must be given at the end of the paper. They should be numbered in sequence starting at the beginning of the paper. The numbers (in brackets) should appear in the text at the appropriate places.

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.

Web references

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, 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.

References in a special issue

Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference management software

This journal has standard templates available in key reference management packages EndNote (<http://www.endnote.com/support/enstyles.asp>) and Reference Manager (<http://refman.com/support/rmstyles.asp>). Using plug-ins to wordprocessing packages, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style which is described below.

Reference style

Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.

Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result'

List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

Examples:

Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

A LaTeX bibliography style and article template file can be downloaded from this page:

<http://www.materialstoday.com/materials-chemistry/journals/acta-materialia/>

Journal abbreviations source

Journal names should be abbreviated according to the List of Title Word Abbreviations:

<http://www.issn.org/services/online-services/access-to-the-ltwa/>.

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 50 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 <http://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 <http://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.

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, 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>. In order to ensure that your submitted material is directly usable, please provide the data in one of our recommended file formats. Authors should submit the material in electronic format together with the article and supply a concise and descriptive caption for each file. For more detailed instructions please visit our artwork instruction pages at <http://www.elsevier.com/artworkinstructions>.

Open data

This journal supports Open data, enabling authors to submit any raw (unprocessed) research data with their article for open access publication under the CC BY license. For more information please visit <http://www.elsevier.com/about/research-data/open-data>.

Interactive plots

This journal encourages you to include data and quantitative results as interactive plots with your publication. To make use of this feature, please include your data as a CSV (comma-separated values) file when you submit your manuscript. Please refer to <http://www.elsevier.com/interactiveplots> for further details and formatting instructions.

Submission checklist

It is hoped that this list will be useful during the final checking of an article prior to sending it to the journal's Editor for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:

One Author designated as corresponding Author:

- E-mail address
- Full postal address
- Telephone and fax numbers
- Email addresses provided for all authors

All necessary files have been uploaded

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been "spellchecked" 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 Web)
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print or to be reproduced in color on the Web (free of charge) and in black-and-white in print
- If only color on the Web is required, black and white versions of the figures are also supplied for printing purposes

For any further information please visit our customer support site at <http://epsupport.elsevier.com>.

Overview Articles

Overview articles for *Acta Materialia* are by invitation only and are initiated in one of two ways: (1) the editors decide that a particular topic would make a good Overview, identify experts in the field and solicit an Overview article; or (2) an author who wishes to write an Overview approaches an *Acta Materialia* editor, usually by email, and requests to submit a proposal. The next step is to provide a detailed outline of the proposed article along with brief bios for all potential co-authors. These documents will be circulated among the *Acta Materialia* editors for approval. If the majority of the editors approve the proposal, then a formal invitation will be sent to the author(s) by email.

If you have been invited by an *Acta Materialia* editor to submit an Overview, please consult the Guide for Authors when preparing your article. The format is the same as for a regular full-length article, except Overviews are expected to be longer and may have more than the usual number of figures if needed. In other words, there will be a title page with essential title page information as described in the Guide for Authors (including Abstract and keywords) and sections are numbered with appropriate headings, beginning with an Introduction and ending with Conclusions or a Summary. References should be in *Acta Materialia* style; this and other paper preparation details such as font size, etc., are covered elsewhere in the Guide for Authors.

Overview review time may be longer than regular length articles due to their length and extensive content, and usually three reviews are sought whereas the regular articles are typically reviewed by only one referee.

Data in Brief

Authors have the option to convert any or all parts of their supplementary data into one or multiple Data in Brief articles, a new kind of article that houses and describes their data. Data in Brief articles ensure that your data, which is normally buried in supplementary material, is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You can submit your Data in Brief directly alongside your research article submission (either initially or at the revision stage). If your research article is accepted, your Data in Brief article will be editorially reviewed and published in the new, Open Access journal, [Data in Brief](#). Your Data in Brief and research article will directly cite and link to each other (see published [examples](#)). The open access fees will be waived if your article is submitted by December 31, 2014. Please use the following [template](#) to write your Data in Brief.

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.

Online proof correction

Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. 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. 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 http://help.elsevier.com/app/answers/detail/a_id/89/p/8045/. You can track your accepted article at <http://www.elsevier.com/trackarticle>. You are also welcome to contact Customer Support via <http://support.elsevier.com>.

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