

## TABLE OF CONTENTS

---

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



ISSN: 0266-3538

## DESCRIPTION

---

*Composites Science and Technology* publishes refereed original articles on the fundamental and applied science of **engineering composites**. The primary focus of this journal is on **polymeric matrix** composites with **reinforcements/fillers** ranging from nano- to macro-scale. *CSTE* encourages manuscripts reporting unique, innovative contributions to the physics, chemistry, materials science and applied mechanics aspects of **advanced composites**.

Besides traditional fiber reinforced composites, novel composites with significant potential for engineering applications are encouraged. These may include, but are not limited to, nanocomposites, biomedical composites, green/eco composites, energy composites, and composites mimicking natural materials. Manuscripts dealing with multi-scale and multi-functional issues and performance as well as interdisciplinary approaches to the study of new generation composite materials are welcome. Analytical work should be validated. Publication of manuscripts reporting routine processing, synthesis and property characterization are not a priority of *CSTE*.

In order to expedite the handling of [submissions](#), manuscripts will be given a preliminary review prior to the full reviewing process to evaluate their suitability for *CSTE*. General Review articles as well as Feature articles covering topics of major interests to the readers will be presented at regular intervals, often at the invitation of the Editors. *CSTE* does not accept short communications or letters. It is the aim of *CSTE* to play an effective role in the rapid dissemination of research findings in the ever-evolving field of composite materials.

## AUDIENCE

---

Materials Scientists, Stress Analysts, Aeronautical, Structural and Mechanical Engineers.

## IMPACT FACTOR

---

2013: 3.633 © Thomson Reuters Journal Citation Reports 2014

## ABSTRACTING AND INDEXING

---

Applied Mechanics Reviews  
Ceramic Abstracts  
Chemical Abstracts  
Current Contents  
International Aerospace Abstracts  
Materials Information  
Materials Science Citation Index  
Metals Abstracts  
Engineering Index  
INSPEC  
Polymer Contents  
SCISEARCH  
Science Citation Index  
World Textile Abstracts  
Scopus

## EDITORIAL BOARD

---

### *Editor-in-Chief*

**Tsu-Wei Chou**, Dept. of Mechanical Engineering, University of Delaware, Newark, DE 19716-3140, Delaware, USA

### *Asian and Australasian Editors*

**Y.W. Mai**, University of Sydney, Sydney, New South Wales, Australia

**W. Yang**, Zhejiang University, Hangzhou, China

**M.Q. Zhang**, Zhongshan University, Guangzhou, China

### *European Editors*

**K. Schulte**, Polymers & Composites, Technische Universität Hamburg-Harburg (TUHH), Denickestrasse 15, D-21073, Hamburg, Germany

**M. Quaresimin**, Dept. of Management and Engineering, Università degli Studi di Padova, Stradella S.Nicola 3, 36100, Vicenza, Italy

### *Editorial Associate*

**B.E. Choplinsky**, Dept. of Mechanical Engineering, University of Delaware, Newark, DE 19716-3140, Delaware, USA

### *Honorary Editor*

**B. Harris**, Claverton Down, Bath, UK

### *Editorial Board*

**W. Becker**, Technische Universität Darmstadt, Darmstadt, Germany

**L. Berglund**, KTH Royal Institute of Technology, Stockholm, Sweden

**A. Bismarck**, Imperial College London, UK and University of Vienna, Austria

**A.K. Bledzki**, Universität Kassel, Kassel, Germany and West Pomeranian University of Technology Szczecin, Poland

**V. M. A. Calado**, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

**W.J. Cantwell**, University of Liverpool, Liverpool, UK

**A. Carlsson**, Florida Atlantic University, Boca Raton, Florida, USA

**J. Cavaille**, INSA de Lyon, INSA de LYON, France

**F.K. Chang**, Stanford University, Stanford, California, USA

**T.W. Clyne**, University of Cambridge, Cambridge, England, UK

**W.A. Curtin**, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

**H. Degischer**, Technische Universität Wien, Wien, Austria

**S. Du**, Harbin Institute of Technology, Harbin, China

**P. Ermanni**, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich, Switzerland

**K. Friedrich**, Technische Universität Kaiserslautern, Kaiserslautern, Germany

**Q. Fu**, Sichuan University, Chengdu, China

**H. Fukuda**, Tokyo University of Science, Chiba, Japan

**K. Gamstedt**, Uppsala University, Uppsala, Sweden

**R.F. Gibson**, University of Nevada at Reno, Reno, Nevada, USA

**J.-C. Han**, Harbin Institute of Technology, Harbin, China

**S.V. Hoa**, Concordia University, Montreal, Quebec, Canada  
**M. Hojo**, Kyoto University, Kyoto, Japan  
**S.H. Hong**, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea  
**P. Hubert**, McGill University, Montreal, Quebec, Canada  
**T. Ishikawa**, National Aerospace Laboratory (NLR), Mitaka, Japan  
**F.R. Jones**, University of Sheffield, Sheffield, England, UK  
**V. Kostopoulos**, University of Patras, Patras, Greece  
**M.S. Kumosa**, University of Denver, Denver, Colorado, USA  
**P. Ladeveze**, Ecole Normale Supérieure (ENS) de Cachan, Cachan, France  
**L.J. Lee**, Ohio State University, Columbus, Ohio, USA  
**W.I. Lee**, Seoul National University (SNU), Gwanag-Gu, Seoul, South Korea  
**J. Llorca**, Polytechnic University of Madrid & IMDEA Materials Institute, Madrid, Spain  
**S. V. Lomov**, KU Leuven, Heverlee-Leuven, Belgium  
**A.C. Loos**, Michigan State University, East Lansing, Michigan, USA  
**R. S. Mauler**, UFRGS, Rio Grande do Sul, Brazil  
**S.T. Mileiko**, Russian Academy of Sciences, Chernogolovka, Moscow, Russian Federation  
**A.N. Netravali**, Cornell University, Ithaca, New York, USA  
**T. Ogasawara**, Japan Aerospace Exploration Agency (JAXA), Tokyo, Japan  
**W. Pan**, Tsinghua University, Beijing, China  
**C. R. Park**, Seoul National University (SNU), Seoul, South Korea  
**A.A. Peijs**, Queen Mary, University of London (QMUL), London, UK  
**S.L. Pheonix**, Cornell University, Ithaca, New York, USA  
**R. Pipes**, University of Akron, Akron, Ohio, USA  
**Y.D.S. Rajapakse**, Office of Naval Research, Arlington, Virginia, USA  
**R.S. Ruoff**, University of Texas, Austin, Texas, USA  
**N.R. Sottos**, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA  
**C. Soutis**, University of Manchester, Manchester, England, UK  
**D. Srivastava**, University of California at San Francisco (UCSF), San Francisco, California, USA  
**C.T. Sun**, Purdue University, West Lafayette, Indiana, USA  
**N.H. Tai**, National Tsing Hua University, Hsinchu, Taiwan, ROC  
**H.D. Wagner**, Weizmann Institute of Science, Rehovot, Israel  
**H. Wang**, Zhejiang University, Zhejiang, China  
**M. Wang**, The University of Hong Kong, Hong Kong, China  
**A. M. Wass**, University of Michigan, Ann Arbor, Michigan, USA  
**X.-L. Xie**, Huazhong University of Science and Technology, Wuhan, China  
**L. Ye**, University of Sydney, Sydney, New South Wales, Australia  
**D. Zhang**, Shanghai Jiao Tong University, Shanghai, China  
**Z. Zhang**, National Center for Nanoscience and Technology, Beijing, China

## GUIDE FOR AUTHORS

---

### INTRODUCTION

*Composites Science and Technology* publishes refereed original articles on the fundamental and applied science of engineering composites. The primary focus of this journal is on polymeric matrix composites with reinforcements/fillers ranging from nano- to macro-scale. *CSTE* encourages manuscripts reporting unique, innovative contributions to the physics, chemistry, materials science and applied mechanics aspects of advanced composites.

Besides traditional fiber reinforced composites, novel composites with significant potential for engineering applications are encouraged. These may include, but are not limited to, nanocomposites, biomedical composites, green/eco composites, energy composites, and composites mimicking natural materials. Manuscripts dealing with multi-scale and multi-functional issues and performance as well as interdisciplinary approaches to the study of new generation composite materials are welcome. Analytical work should be validated. Publication of manuscripts reporting routine processing, synthesis and property characterization are not a priority of *CSTE*.

In order to expedite the handling of submissions, manuscripts will be given a preliminary review prior to the full reviewing process to evaluate their suitability for *CSTE*. General Review articles as well as Feature articles covering topics of major interests to the readers will be presented at regular intervals, often at the invitation of the Editors. *CSTE* does not accept short communications or letters. It is the aim of *CSTE* to play an effective role in the rapid dissemination of research findings in the ever-evolving field of composite materials.

#### **Types of paper**

Original papers and review papers, on all aspects of fundamental and applied science of engineering composites will be considered for publication. The journal currently does not publish letters or short communications. **Submissions must be accompanied by a letter stating 1) the significance of the paper for the research community and 2) what it contains that is most important, new or original. The new guideline of manuscript length is a maximum of 22 pages including figures and tables. The text should be 12-point with double spacing and there should not be more than two figures per page and no more than two tables per page, depending on their sizes. Please note 12-pt font size and double spacing should be used throughout the whole manuscript (inclusive of text, references and tables), no schemes are allowed but integrated within the text, and no supplementary information is permitted.**

### 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](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/postingpolicy>), 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**

This policy concerns the addition, deletion, or rearrangement of author names in the authorship of accepted manuscripts:

*Before the accepted manuscript is published in an online issue:* Requests to add or remove an author, or to rearrange the author names, must be sent to the Journal Manager from the corresponding author of the accepted manuscript and must include: (a) the reason the name should be added or removed, or the author names rearranged and (b) written confirmation (e-mail, fax, 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. Requests that are not sent by the corresponding author will be forwarded by the Journal Manager to the corresponding author, who must follow the procedure as described above. Note that: (1) Journal Managers will inform the Journal Editors of any such requests and (2) publication of the accepted manuscript in an online issue is suspended until authorship has been agreed.

*After the accepted manuscript is published in an online issue:* Any requests to add, delete, or rearrange author names in an article published in an online issue will follow the same policies as noted above and result in a corrigendum.

## **Copyright**

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

### *For subscription articles*

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>.

### *For open access articles*

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

## **Retained author rights**

As an author you (or your employer or institution) retain certain rights. For more information on author rights for:

Subscription articles please see <http://www.elsevier.com/journal-authors/author-rights-and-responsibilities>.

Open access articles please see <http://www.elsevier.com/OAauthoragreement>.

## **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 agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies 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 their research funder

## Subscription

- Articles are made available to subscribers as well as developing countries and patient groups through our access programs (<http://www.elsevier.com/access>)
- No open access publication fee

All articles published open access will be immediately and permanently free for everyone to read and download. Permitted reuse is defined by your choice of one of the following Creative Commons user licenses:

**Creative Commons Attribution (CC BY):** lets others distribute and copy the article, to create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), to include in a collective work (such as an anthology), to 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-ShareAlike (CC BY-NC-SA):** for non-commercial purposes, lets others distribute and copy the article, to create extracts, abstracts and other revised versions, adaptations or derivative works of or from an article (such as a translation), to include in a collective work (such as an anthology), to text and data mine the article, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, do not modify the article in such a way as to damage the author's honor or reputation, and license their new adaptations or creations under identical terms (CC BY-NC-SA).

**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.

To provide open access, this journal has a publication fee which needs to be met by the authors or their research funders for each article published open access.

Your publication choice will have no effect on the peer review process or acceptance of submitted articles.

The open access publication fee for this journal is **\$3300**, 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/cste/>

## Additional information

All papers are independently refereed.

## 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**

Follow this order when typing manuscripts: Title, Authors, Affiliations, Abstract, Keywords, Main text, Acknowledgements, Appendix, References, Figure Captions and then Tables.

Authors should consult a recent issue of the journal for style if possible. The Editors reserve the right to adjust style to certain standards of uniformity.

The use of property names should be avoided as far as possible, but may be acceptable where, in the Editors opinion, the proprietary name is a universally known description of the material in question, eg Kevlar-49.

### *Text Layout*

Use double spacing and wide (3 cm) margins. (Avoid full justification, i.e., do not use a constant right-hand margin.) Ensure that each new paragraph is clearly indicated. Present tables and figure legends on separate pages at the end of the manuscript. If possible, consult a recent issue of the journal to become familiar with layout and conventions. Number all pages consecutively, use 12 pt font size and standard fonts.

### *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.

### *Material and methods*

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.

### *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.

### **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.** 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.

• **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.

### **Abstract**

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

### **Keywords**

Authors should select a maximum of five keywords from the list at the end of these instructions. Each Keyword should be accompanied by the capital letter denoting the category from which the keyword has been selected. If authors wish they may nominate one keyword which is not included in the list below. The list of up to five keywords should appear on the title page of each paper submitted for consideration, following the abstract.

### **Abbreviations**

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article. Abbreviations for units should follow the suggestions of the British Standards publication BS 1991. The full stop should not be included in abbreviations, eg m (not m.), ppm (not p.p.m.): '%' and '/' should be used in preference to 'per cent' and 'per'. Where abbreviations are likely to cause ambiguity or not be readily understood by an international readership, units should be given in full.

### **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.).

### **Units**

Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

### **Nomenclature and units**

Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. You are urged to consult IUPAC: Nomenclature of Organic Chemistry: <http://www.iupac.org/> for further information.

### **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 printed 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 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.

#### *Text graphics*

Text graphics may be embedded in the text at the appropriate position. If you are working with LaTeX and have such features embedded in the text, these can be left. See further under Electronic artwork.

#### **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**

##### *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*

All publications cited in the text should be presented in a list of references following the text of the manuscript. In the text refer to references by a number in square brackets on the line (e.g. Since Wu [1]), and the full reference should be given in a numerical list at the end of the paper.

#### **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.

#### **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**

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
- Phone numbers

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 reproduction in black-and-white, please supply black-and-white versions of the figures for printing purposes.

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.

### *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/](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>.

*List of keywords*

### **A. Material:**

Adhesive joints  
Alloys  
Amorphous materials  
Aramid fibre  
Carbon fibres  
Carbon nanotubes  
Coating  
Coupling agents  
Fabrics/textiles  
Fibres  
Flexible composites  
Functional composites  
Glass fibres  
Glasses  
Hybrid composites

Intermetallics  
Laminate  
Layered structures  
Metal-matrix composites (MMCs)  
Metals  
Nanoclays  
Nano composites  
Nano particles  
Oxides  
Particle-reinforced composites  
Polymer-matrix composites (PMCs)  
Polymers  
Pre-ceramic polymer  
Recycling  
Sandwich  
Structural composites  
Short-fibre composites  
Smart materials  
Textile composites  
Wood

**B. Property:**

Corrosion  
Creep  
Curing  
Debonding  
Defects  
Delamination  
Durability  
Electrical properties  
Embrittlement  
Environmental Degradation  
Fatigue  
Fibre/matrix bond  
Fracture  
Fracture toughness  
Fragmentation  
Friction/wear  
High-temperature properties  
Hygrothermal effect  
Impact behaviour  
Interface  
Interfacial strength  
Interphase  
Magnetic properties  
Matrix cracking  
Mechanical properties  
Non-linear behaviour  
Plastic deformation  
Porosity/Voids  
Strength  
Stress/strain curves  
Surface treatments  
Synergism  
Thermal properties  
Thermomechanical properties  
Transport properties  
Vibration

## **C. Analysis:**

Anelasticity  
Anisotropy  
Buckling  
Complex moduli  
Computational mechanics  
Crack  
Damage mechanics  
Damage tolerance  
Deformation  
Elastic properties  
Failure criterion  
Fibre bridging  
Finite element analysis (FEA)  
Laminate theory  
Modelling  
Multiscale modeling  
Notch  
Plate theory  
Probabilistic methods  
Residual stress  
Sandwich structures  
Shell theory  
Statistics  
Stress concentrations  
Stress relaxation  
Stress transfer  
Transverse cracking

## **D. Testing:**

Acoustic emission  
Atomic force microscopy (AFM)  
Differential scanning calorimetry (DSC)  
Dynamic mechanical thermal analysis (DMTA)  
Electron energy loss spectroscopy (EELS)  
Electron microprobe analysis  
Fractography  
Hardness testing  
Infrared (IR) spectroscopy  
Life prediction  
Moire techniques  
Non-destructive testing  
Optical microscopy  
Photoelectron spectroscopy (XPS)  
Raman spectroscopy  
Rheology  
Scanning electron microscopy (SEM)  
Scanning/transmission electron microscopy (STEM)  
Secondary ion mass spectrometry (SIMS)  
Thermogravimetric analysis (TGA)  
Transmission electron microscopy (TEM)  
Ultrasonics  
X-ray diffraction (XRD)  
X-ray fluorescence (XRF)

## **E. Processing:**

Annealing

Braiding  
Casting  
Chemical vapour deposition (CVD)  
Chemical vapour infiltration (CVI)  
Directional solidification  
Electro-spinning  
Extrusion  
Filament winding  
Heat treatment  
Injection moulding  
Ion implantation  
Ion plating  
Isostatic pressing  
Knitting  
Liquid metal infiltration (LMI)  
Melt-spinning  
Microwave processing  
Physical vapour deposition  
Plasma deposition  
Plasma spraying  
Powder processing  
Pultrusion  
Resin transfer moulding (RTM)  
Sintering  
Slip casting  
Sol-gel methods  
Welding/joining

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