



# CURRENT OPINION IN CHEMICAL ENGINEERING

## AUTHOR INFORMATION PACK

### TABLE OF CONTENTS

●	<b>Description</b>	<b>p.1</b>
●	<b>Editorial Board</b>	<b>p.2</b>
●	<b>Guide for Authors</b>	<b>p.4</b>



ISSN: 2211-3398

### DESCRIPTION

*Current Opinion in Chemical Engineering* is devoted to bringing forth short and focused review articles written by experts on current advances in different areas of **chemical engineering**. Only invited review articles will be published.

The goals of each review article in *Current Opinion in Chemical Engineering* are:

1. To acquaint the reader/researcher with the most important recent papers in the given topic.
2. To provide the reader with the views/opinions of the expert in each topic.

The reviews are short (about 2500 words or 5-10 printed pages with figures) and serve as an invaluable source of information for researchers, teachers, professionals and students. The reviews also aim to stimulate exchange of ideas among experts.

Themed sections:

Each review will focus on particular aspects of one of the following themed sections of chemical engineering:

1. **Nanotechnology**
2. **Energy and environmental engineering**
3. **Biotechnology and bioprocess engineering**
4. **Biological engineering** (covering tissue engineering, regenerative medicine, drug delivery)
5. **Separation engineering** (covering membrane technologies, adsorbents, desalination, distillation etc.)
6. **Materials engineering** (covering biomaterials, inorganic especially ceramic materials, nanostructured materials).
7. **Process systems engineering**
8. **Reaction engineering and catalysis**.

Selection of the topics to be reviewed:

Section Editors of each themed section are authorities in the field and are selected by the Editors of the journal. They divide their section into a number of topics ensuring that the field is comprehensively covered and that all issues of current importance are emphasized. Section Editors commission reviews from authorities on each topic that they have selected. Each issue of the journal will focus on two themed sections. There will be four issues of the journal per year covering each themed section once per year.

Reviews:

Authors write short review articles in which they present most recent developments in their subject, emphasizing the aspects that, in their opinion, are most important. In addition, they provide short annotations to the papers that they consider to be most interesting from all those published in their topic over the previous three to four years. The review articles undergo internal review by the Section Editors, [Editorial Board](#) members and the Editors.

Editorial Overview:

Section Editors write a short overview at the beginning of the section to introduce the reviews and to draw the reader's attention to any particularly interesting developments.

## EDITORIAL BOARD

---

### ***Editor-in-Chief***

**K.K. Sirkar**, Dept. of Chemical Engineering, New Jersey Institute of Technology

### ***Section Editors***

**Vilas Pol**, Purdue University, West Lafayette, Indiana, USA

### ***Biological Engineering***

**K. Konstantopoulos**, Johns Hopkins University, Baltimore, Maryland, USA

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

### ***Energy and Environmental Engineering***

**R. Agrawal**, Purdue University, West Lafayette, Indiana, USA

**V.I. Manousiouthakis**, University of California, Los Angeles, California, USA

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

### ***Materials Engineering***

**T. Kyu**, University of Akron, Akron, Ohio, USA

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

**J.A. Sekhar**, University of Cincinnati, Cincinnati, Ohio, USA

### ***Nanotechnology***

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

**H. Yang**, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

**H.C. Zeng**, National University of Singapore, Singapore

### ***Process Systems Engineering***

**M. El-Halwagi**, Texas A&M University, College Station, Texas, USA

**K.M Ng**, Hong Kong University of Science & Technology, Hong Kong, China

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

### ***Reaction Engineering and Catalysis***

**M.O. Coppens**, University College London (UCL), London, England, UK

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

**T. Tsotsis**, University of Southern California, Los Angeles, California, USA

### ***Separation Engineering***

**W.S. Ho**, Ohio State University, Columbus, Ohio, USA

**K. Li**, Imperial College London, London, UK

**V.G. Pol**, Purdue University, West Lafayette, Indiana, USA

### ***Editorial Board***

**R. Agrawal**, Purdue University, West Lafayette, Indiana, USA

**A.T. Bell**, University of California at Berkeley, Berkeley, California, USA

**N.T.-S. Chung**, National University of Singapore, Singapore

**Z.F. Cui**, University of Oxford, Oxford, UK

**M. Flytzani-Stephanopoulos**, Tufts University, Medford, Massachusetts, USA

**F. Friedler**, University of Pannonia, Veszprem, Hungary

**R. Gani**, Danmarks Tekniske Universitet (DTU), Lyngby, Denmark

**R. Hernandez**, University of Louisiana at Lafayette, Lafayette, Louisiana, USA

**W.S. Ho**, Ohio State University, Columbus, Ohio, USA

**W.-S. Hu**, University of Minnesota, Minneapolis, Minnesota, USA

**D.M. Kalyon**, Stevens Institute of Technology, Hoboken, New Jersey, USA

**B. Khusid**, New Jersey Institute of Technology, Newark, New Jersey, USA

**R.S. Langer**, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA  
**K. Li**, Imperial College London, London, UK  
**J.C. Liao**, University of California at Los Angeles, Los Angeles, California, USA  
**G. B. Marin**, Universiteit Gent, Ghent, Belgium  
**W. Marquardt**, RWTH Aachen University (RWTH), Aachen, Germany  
**J.H. Meldon**, Tufts University, Medford, Massachusetts, USA  
**R.D. Noble**, University of Colorado, Boulder, Colorado, USA  
**L.G. Papageorgiou**, University College London (UCL), London, England, UK  
**E.T. Papoutsakis**, University of Delaware, Newark, Delaware, USA  
**D.R. Paul**, University of Texas at Austin, Austin, Texas, USA  
**N.A. Peppas**, University of Texas at Austin, Austin, Texas, USA  
**S.E. Pratsinis**, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich, Switzerland  
**D. Ramkrishna**, Purdue University, West Lafayette, Indiana, USA  
**T.P. Russell**, University of Massachusetts at Amherst, Amherst, Massachusetts, USA  
**J.C. Schouten**, Technische Universiteit Eindhoven, Eindhoven, Netherlands  
**S. Sikdar**, National Risk Management Research Laboratory, Cincinnati, Ohio, USA  
**G.N. Stephanopoulos**, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA  
**C. Tien**, Syracuse University, Syracuse, New York, USA  
**T. Tsotsis**, University of Southern California, Los Angeles, California, USA  
**N. Wagner**, University of Delaware, Newark, Delaware, USA  
**R.T. Yang**, University of Michigan, Ann Arbor, Michigan, USA  
**M. Yoshikawa**, Kyoto Institute of Technology, Kyoto, Japan  
**H.C. Zeng**, National University of Singapore, Singapore  
**A.L. Zydney**, Pennsylvania State University, University Park, Pennsylvania, USA

## GUIDE FOR AUTHORS

---

### INTRODUCTION

The Current Opinion journals were developed out of the recognition that it is increasingly difficult for specialists to keep up to date with the expanding volume of information published in their subject. In the Current Opinion journals, we help the reader by providing in a systematic manner: (1) The views of experts on current advances in the field in a clear and readable form. (2) Evaluations of the most interesting papers, annotated by experts, from the great wealth of original publications.

The aim of the manuscript is to review recent articles, with particular emphasis on those articles published in the **past two years**. In addition to describing recent trends, you are encouraged to give your subjective opinion of the topics discussed, although you should not concentrate unduly on your own research. Your review should be approximately 2000 words (not including references or reference notes), with approximately 50 references and, as such, the review is intended to be a concise view of the field as it is at the moment, rather than a comprehensive overview. Our audience ranges from student to professor, so articles must be accessible to a wide readership. Please avoid jargon, but do not oversimplify: be accurate and precise throughout. Occasionally, unpublished data can be referred to, but only when essential and should never be used to substantiate any significant point.

*Contact details for submission*

Submission to this journal is **by invitation only**. Please contact your Content Development Manager by email if you have any questions.

### 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/conflictsofinterest>. 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](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.

## *Authors*

Please provide the names of all authors in full, including first name. No more than five authors should be listed (only those who contributed to the actual writing of the manuscript, rather than members of the laboratory contributing to primary work). Anyone else who contributed to the article can be thanked in the acknowledgements section.

## **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 3750**, excluding taxes. Learn more about Elsevier's pricing policy: <http://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.

### **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.

## **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: <https://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**

### *Subdivision - unnumbered sections*

Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross-referencing text: refer to the subsection by heading as opposed to simply 'the text'.

### *Introduction*

The introduction should be accessible to a wide variety of scientists by avoiding the use of jargon and concepts not familiar to non-specialists. It should outline the time period covered and the scope of the review, including the importance of and rationale behind your article. The introduction should include only a few background references.

### *Main text of review*

Use concise, logical subheadings to provide clear links between the different sections and guide the reader through your review. Please write all abbreviations in full on first use, and use the abbreviation thereafter.

### *Conclusion*

The conclusions section should summarise the topics discussed and describe future directions, including the author's opinions, as appropriate.

### **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.

### *Abstract*

All reviews should be prefaced by an abstract of 100-120 words. The abstract is important: it should contain sufficient information for the reader to be able to appreciate the relevance of the full article when read alone. It should include background information and specific examples of *recent advances*, rather than promises that a particular subject 'will be discussed' - the scope of the review should instead appear at the end of the introduction. References should **not** be included. Abbreviations should be avoided as far as possible.

### **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 <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 and in accordance with all technical requirements: [Illustration Service](#).

### **Highlights**

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). See <https://www.elsevier.com/highlights> for examples.

## 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.).

Funding bodies should also be mentioned (please give full names rather than abbreviations), together with any relevant grant numbers.

## 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.

## 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

### Figures

You are encouraged to include up to four additional elements in your review (i.e. a combination of Figures, Tables and Boxes). You should include at least one figure to summarise the main concepts discussed, and all figures should help to explain the concepts discussed in the text. All illustrations should be labelled as figures, and figures should be cited in the main text of the review in numerical order. Please note that it is the responsibility of the authors to obtain permission to reproduce copyrighted material (figures that have been published before) from the original authors and publishers.

### 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/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) in addition to color reproduction in print. For further information on the preparation of electronic artwork, please see <https://www.elsevier.com/artworkinstructions>.

#### *Figure captions*

Ensure that each illustration has a caption. The caption should describe the figure in full, without further reference to the main text. A caption should comprise a brief title (**not** on the figure itself) and a description of the illustration. Supply captions separately, not attached to the figure. All abbreviations used in the figure and not in the main text should be defined at the end of the figure legend. References which appear in the figure itself should be mentioned in the figure caption as well.

#### **Tables and boxes**

Tables should be used to tabulate data discussed in further detail in the review. Boxes should be used for additional explanatory material that, although essential, interrupts the flow of the text. In addition, you can include a glossary box to describe/define terms or abbreviations used in your review. Tables and boxes should always be referred to in the main text of the article and should have an appropriate title. Please use the template in MS Word to create your tables. All such text boxes will be included in the main text word count, and must be cited in the text in numerical order.

#### **References**

##### *Citation in text*

The reference list should not be exhaustive - simply alert the reader to the most innovative recent papers and key reviews. Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Unpublished results and personal communications are not recommended in the reference list but may be mentioned in the text. References should be numbered consecutively in the order in which they are cited in the text, followed by those that are only cited in the figure legends or tables. Please ensure that each item in the reference list has its own number, avoiding joint references (for example, references [32a,32b] should be listed and cited as [32,33] and subsequent references numbered accordingly). Papers accepted as 'in press' may be included.

##### *Reference management software*

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles (<http://citationstyles.org>), such as Mendeley (<http://www.mendeley.com/features/reference-manager>) and Zotero (<https://www.zotero.org/>), as well as EndNote (<http://endnote.com/downloads/styles>). Using the word processor plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide.

##### *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] de Alba E, Antoro J, Rico MA, Jimenez MA: **De novo design of a monomeric three-stranded anti-parallel  $\beta$ -sheet**. *Protein Sci* 1999, **8**:854-865.

Reference to a book:

[2] Archer MD, Barber J (Eds): *Molecular to Global Photosynthesis*. Imperial College Press; 2004.

Reference to a chapter in an edited book:

[3] Barber J, Kuhlbrandt W: **Photosynthesis and photoconversion**. In *Molecular to Global Photosynthesis*. Edited by Archer M, Barber J. Imperial College Press; 2004:3-89.

- Number of authors: If more than eleven authors are credited for an article, please list only the first ten, then add *et al*. Please DO NOT shorten the list of authors before the cut-off of ten. Journal names should be abbreviated in accordance with Index Medicus.

- Online journal references: When citing online journal references, please adhere to the convention described above, inserting the digital object identifier (DOI) after the year.

- In-text citation: When citing references in the text, please use [square brackets] rather than (parentheses) or superscript<sup>1,2</sup> to denote the citations. Please also ensure the citations are numbered and NOT Harvard referencing style (i.e. [Moore 1965; Myrdal 1957]).

- Annotations

The majority of the references (please aim to cite approximately 50) should come from the period under review (i.e. **the past two years**) and, in general, at least 10% of these should be selected and annotated as being papers of special interest (•) or outstanding interest (••). Annotated references MUST be from the past two years, and the annotation should provide a brief description of the major findings and the importance of the study. **This is an essential part of each review** and is very popular with our readers. For example:

- 30. Wong FS, Karttunen J, Dumont C, Wen L, Visintin I, Pilip IM, Shastri N, Parner EG, Janeway CA Jr; **Identification of an MHC class I-restricted autoantigen in type 1 diabetes by screening an organ-specific cDNA library**. *Nat Med* 1999, **5**:1026-1031.

Using class I tetramers, the authors demonstrate that insulin-specific CD8+ T cells account for a large proportion of infiltrated T cells in the islets of prediabetic NOD mice. This is the first study to use peptide multimers to decipher the mechanism of autoimmunity.

- Exclude from reference list

Unpublished data (including papers in preparation, papers submitted for publication and personal communications), conference abstracts, PhD theses, websites/URLs and computer programs/databases **should not** be mentioned in the reference list. If you feel that the citation is crucial to the review, please mention it in the text only (see below). Please keep in mind that citations should be restricted to sources freely available to most readers. (If a submitted paper is accepted for publication before we go to press, then this information can be added in an 'Update' section.)

These references should be presented in the text as follows (please list the first author only, including initials and surname):

1. Personal communications: (SW Churchill *et al.*, personal communication [or unpublished if referring to the authors' own work]).

2. Submitted papers/unpublished data: (IMN Author *et al.*, unpublished)

3. Abstracts (give full information but not title): (A Early *et al.*, abstract 54, 3rd International Meeting of Cellular Immunology, Washington DC, September 1998) or (A Early, abstract in *Soc Neurosci Abstr* 1998, 4:154).

4. PhD theses: (R Arthur Goode, PhD thesis, University of Hawaii, 1988).

5. Websites: (Biological Biochemical Image Database; URL: <http://bbid.grc.nia.nih.gov/>)

6. Computer program/database: (Actin database, University of Harvard). (unless the program/database details have been published, in which case cite as a normal reference. For example, Nicholls A, Bharadwaj R, Honig, B: GRASP: **a graphical representation and analysis of surface properties**. *Biophys J* 1993, **64**:166-170.)

Note that personal communications must be authorised by those involved. You are responsible for obtaining permission to use personal communications.

### 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.

### **Supplementary material**

Supplementary material can 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. Please note that such items are published online exactly as they are submitted; there is no typesetting involved (supplementary data supplied as an Excel file or as a PowerPoint slide will appear as such online). Please submit the material together with the article and supply a concise and descriptive caption for each file. If you wish to make any changes to supplementary data during any stage of the process, then please make sure to provide an updated file, and do not annotate any corrections on a previous version. Please also make sure to switch off the 'Track Changes' option in any Microsoft Office files as these will appear in the published supplementary file(s). For more detailed instructions please visit our artwork instruction pages at <https://www.elsevier.com/artworkinstructions>.

### **Database linking**

Elsevier encourages authors to connect articles with external databases, giving readers access to relevant databases that help to build a better understanding of the described research. Please refer to relevant database identifiers using the following format in your article: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN). See <https://www.elsevier.com/databaselinking> for more information and a full list of supported databases.

### **Interactive MATLAB Figure Viewer**

This journal features the Interactive MATLAB Figure Viewer, allowing you to display figures created in MATLAB in the .FIG format in an interactive viewer next to the article. Please go to <https://www.elsevier.com/matlab> for more information and submission instructions.

### **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**

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

All necessary files have been uploaded

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

Further considerations

- The number of words (excluding the abstract and references does not exceed 2000)
- Manuscript has been "spellchecked" and "grammar-checked"
- References are in the correct format for this journal
- All references cited in the text are mentioned in the Reference list
- References have been annotated
- Permission has been obtained for use of copyrighted material from other sources (including the Web)

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