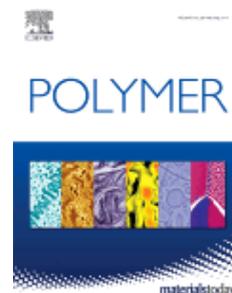




TABLE OF CONTENTS

●	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: 0032-3861

DESCRIPTION

Polymer is an interdisciplinary journal dedicated to publishing innovative and significant advances in Polymer Physics, Chemistry and Technology. We welcome submissions on polymer hybrids, nanocomposites, characterisation and self-assembly. *Polymer* also publishes work on the technological application of polymers in Energy and optoelectronics.

The main scope is covered but not limited to the following core areas:

Polymer Materials

Nanocomposites and hybrid nanomaterials Polymer blends, films, fibres, networks and porous materials **Physical Characterization** Characterisation, modelling and simulation* of molecular and materials properties in bulk, solution, and thin films **Polymer Engineering**

Advanced multiscale processing methods **Polymer Synthesis, Modification and Self-assembly**

Including designer polymer architectures, mechanisms and kinetics, and supramolecular polymerization **Technological Applications**

Polymers for energy generation and storage Polymer membranes for separation technology Polymers for opto- and microelectronics

The scope of *Polymer* no longer includes the biomedical applications of polymers. We would strongly recommend that authors consider submitting these papers to our excellent sister title *European Polymer Journal* <https://www.journals.elsevier.com/european-polymer-journal>

Article Types and Submission

Polymer publishes the following article types: original research papers, review articles, featured articles, short communications and Research Insights.

Please see our [Guide for Authors](#) for information on article submission. If you require any further information or help, please visit our [Support Center](#)

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](#).

AUDIENCE

Scientists and engineers at academia, industry, government and consultancies working in all areas of polymer science and technology.

IMPACT FACTOR

2017: 3.483 © Clarivate Analytics Journal Citation Reports 2018

ABSTRACTING AND INDEXING

Current Contents
Chemical Titles
Chemical Abstracts
Physics Abstracts
Polymer Contents
Science Abstracts - Physics Abstracts
Engineering Index
Abstract Bulletin of the Institute of Paper Science and Technology
FIZ Karlsruhe
Scopus

EDITORIAL BOARD

Editors-in-Chief

Stephen Z.D. Cheng, University of Akron, Akron, Ohio, USA
Axel H.E. Müller, Johannes Gutenberg Universität Mainz, Mainz, Germany

Senior Editor

Yanchun Han, Changchun Institute of Applied Chemistry, Changchun, China

Editors

Qiang Fu, Sichuan University, Chengdu, China
Kohzo Ito, The University of Tokyo, Chiba, Japan
Hiroshi Jinnai, Tohoku University, Sendai-Shi, Japan
Dongsheng Liu, Tsinghua University, Beijing, China
Alejandro Müller, University of the Basque Country, Donostia-San Sebastián, Spain
Michael S Silverstein, Technion - Israel Institute of Technology, Haifa, Israel
Tsutomu Yokozawa, Kanagawa University, Kanagawa Prefecture, Japan

Executive Board

Wen-Hua Sun, Chinese Academy of Sciences, Beijing, China
Wen-Bin Zhang, Peking University, Beijing, China

Editorial Advisory Board

Lijia An, Changchun Institute of Applied Chemistry, Changchun, China
Wolfgang Binder, Martin-Luther-Universität Halle-Wittenberg, Halle, Germany
Timothy Bunning, Wright-Patterson Air Force Base, AFB, Dayton, Ohio, USA
Neil Cameron, Monash University, Clayton, Victoria, Australia
Er-Qiang Chen, Peking University, Beijing, China
Yongming Chen, Sun Yat-Sen University, Guangzhou, China
Claudio De Rosa, University of Naples Federico II, Napoli, Italy
Benny Freeman, University of Texas at Austin, Austin, Texas, USA
Jan Genzer, University of North Carolina School of Medicine, Raleigh, North Carolina, USA
Mark Geoghegan, University of Sheffield, Sheffield, UK
Charles C Han, Shenzhen University, Shenzhen, China
Benjamin Hsiao, State University of New York (SUNY) at Binghamton, Binghamton, New York, USA
Shinzaburo Ito, Kyoto University, Kyoto, Japan
Georg Krausch, Johannes Gutenberg Universität Mainz, Mainz, Germany
Katharina Landfester, Max Planck Institute (MPI) for Polymer Research, Mainz, Germany
Christopher Li, Drexel University, Philadelphia, Pennsylvania, USA
Zichen Li, Peking University, Beijing, China

Mingjie Liu, Beihang University, Beijing, China
Katja Loos, University of Groningen, Groningen, Netherlands
Christopher Macosko, University of Minnesota, Minneapolis, Minnesota, USA
Krzysztof Matyjaszewski, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA
Petra Pötschke, Leibniz Institute of Polymer Research, Dresden, Germany
Robert Prud'homme, Université de Montréal, Montréal, Canada
Jeffrey Pyun, University of Arizona, Tucson, Arizona, USA
Richard Register, Princeton University, Princeton, New Jersey, USA
Mitsuhiro Shibayama, The University of Tokyo, Naka-Gun, Japan
Sindee Simon, Texas Tech University, Lubbock, Texas, USA
Brent Sumerlin, University of Florida, Gainesville, District of Columbia, USA
Benzhong Tang, Hong Kong University of Science and Technology, Hong Kong, China
Chuanbing Tang, University of South Carolina, Columbia, South Carolina, USA
Kohji Tashiro, Toyota Technological Institute, Tempaku, Nagoya, Japan
Thomas Thurn-Albrecht, Martin-Luther-Universität Halle-Wittenberg, Halle, Germany
Vladimir Tsukruk, Georgia Institute of Technology, Atlanta, Georgia, USA
Richard Turner, Virginia Tech, Blacksburg, Virginia, USA
Mathias Ulbricht, Universität Duisburg-Essen, Essen, Germany
Zhi Yuan Wang, Carleton University, Ottawa, Ontario, Canada
Karen Winey, University of Pennsylvania, Philadelphia, Pennsylvania, USA
Chi Wu, The Chinese University of Hong Kong, Shatin, Hong Kong, China
Yusuf Yagci, Istanbul Technical University, Istanbul, Turkey
Xi Zhang, Tsinghua University, Beijing, China
Lei Zhu, Case Western Reserve University, Cleveland, Ohio, USA
Meifang Zhu, Donghua University, Shanghai, China

GUIDE FOR AUTHORS

Your Paper Your Way

We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.

To find out more, please visit the Preparation section below.

INTRODUCTION

The International Journal for the Science and Technology of Polymers.

In order to achieve rapid publication, it is essential precisely to follow these instructions. Failure to do so can result in a substantial delay in publication.

Types of paper

Polymer publishes *original* research from all areas of polymer science and technology, with emphasis on molecular or mesoscale interpretation of data. Papers from new emerging areas of the field are particularly welcome. The journal publishes *regular articles, communications* (novel, unexpected experimental results or interpretation presented within 4 printed pages) and *feature articles* (usually invited by the Editors).

Contact details for submission

Since 1 September 2005, manuscripts can only be submitted online via the Elsevier Editorial System (EES) at <http://ees.elsevier.com/jpol>.

During the online submission, authors are requested to choose the appropriate Editor from a drop down menu, according to the geographical location of the corresponding author and the subject matter of the paper.

Papers from the Americas should be submitted online via EES to one of the following editors, according to the subject matter:

Professor S.Z.D. Cheng, *Physics and Physical Chemistry*

The Maurice Morton Institute of Polymer Science, University of Akron, Goodyear Polymer Centre, Room 936, Akron, OH 44325-3909, USA

E-mail: scheng@uakron.edu

Professor S.R. Turner, *Chemistry and Synthesis*

Macromolecules and Interfaces Institute, 2 Davidson Hall (0201), Virginia Tech, Blacksburg, VA 24061, USA

E-mail: srtturner@vt.edu

All papers from China (in all subject areas) should be submitted online via EES to:

Professor C.C. Han

Joint Laboratory of Polymer Science and Materials, Institute of Chemistry, The Chinese Academy of Sciences, Zhongguancun, Beijing, 100080, China

E-mail: c.c.han@iccas.ac.cn

Papers from the rest of Asia should be submitted online via EES to one of the following Editors, according to the subject matter:

Professor H. Jinnai, *Physics*

Institute for Materials Chemistry and Engineering, Kyushu University, CE11 Ito Campus, 744 Motooka Nishi-ku, Fukuoka 819-0395, Japan

E-mail: hjinnai@tagen.tohoku.ac.jp

Professor K. Ito, *Physical Chemistry and functionality*

Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa-no-ha 5-1-5-603, Kashiwa, Chiba 277-8561, Japan

E-mail: kohzo@k.u-tokyo.ac.jp

Professor T. Yokozawa, *Chemistry and Synthesis*

Department of Material and Life Chemistry, Kanagawa University, Rokkakubashi, Kanagawa-ku, Yokohama 221-8686, Japan

E-mail: yokozt01@kanagawa-u.ac.jp

Papers from Europe and the rest of the world should be submitted online via EES to one of the following editors:

Professor Dr. M. Ballauff, *Physical Chemistry*

Soft Matter and Functional Materials, Helmholtz-Zentrum Berlin für Materialien und Energie, Glienicker Straße 100, 14109 Berlin, Germany

Email: matthias.ballauff@helmholtz-berlin.de

Professor G. Krausch, *Physics*

Johannes Gutenberg-Universität Mainz, Forum universitatis 2, 55099 Mainz, Germany

Email: krausch@uni-mainz.de

Professor A.H.E. Müller, *Chemistry and Synthesis*

Institute of Organic Chemistry, Johannes Gutenberg University Mainz, Duesbergweg 10-14, D-55099 Mainz, Germany

Email: axel.mueller@uni-mainz.de

Submission checklist

You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address

All necessary files have been uploaded:

Manuscript:

- Include keywords
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations

- Manuscript has been 'spell checked' and 'grammar checked'
- 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)
- A competing interests statement is provided, even if the authors have no competing interests to declare
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our [Support Center](#).

BEFORE YOU BEGIN

Before starting work on their manuscript authors should familiarise themselves with our Ethics in Publishing guidelines.

Ethics in publishing

Please see our information pages on [Ethics in publishing](#) and [Ethical guidelines for journal publication](#).

Declaration of interest

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations

of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. [More information](#).

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, a published lecture or academic thesis, see '[Multiple, redundant or concurrent publication](#)' for more information), 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 [Crossref Similarity Check](#).

Preprints

Please note that [preprints](#) can be shared anywhere at any time, in line with Elsevier's [sharing policy](#). Sharing your preprints e.g. on a preprint server will not count as prior publication (see '[Multiple, redundant or concurrent publication](#)' for more information).

Use of inclusive language

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

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.

Article transfer service

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal.

[More information](#).

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see [more information](#) on this). 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. 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.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' ([more information](#)). Permitted third party reuse of gold open access articles is determined by the author's choice of [user license](#).

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. [More information](#).

Elsevier supports responsible sharing

Find out how you can [share your research](#) published in Elsevier journals.

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 funding bodies will reimburse the author for the gold open access publication fee. Details of [existing agreements](#) are available online.

Open access

This journal offers authors a choice in publishing their research:

Subscription

- Articles are made available to subscribers as well as developing countries and patient groups through our [universal access programs](#).
- No open access publication fee payable by authors.
- The Author is entitled to post the [accepted manuscript](#) in their institution's repository and make this public after an embargo period (known as green Open Access). The [published journal article](#) cannot be shared publicly, for example on ResearchGate or Academia.edu, to ensure the sustainability of peer-reviewed research in journal publications. The embargo period for this journal can be found below.

Gold open access

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

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

For gold 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 gold open access publication fee for this journal is **USD 3400**, excluding taxes. Learn more about Elsevier's pricing policy: <https://www.elsevier.com/openaccesspricing>.

Green open access

Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our [open access page](#) for further information. 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. [Find out more.](#)

This journal has an embargo period of 24 months.

Elsevier Researcher Academy

[Researcher Academy](#) is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

Language services

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who require information about language editing and copyediting services pre- and post-submission please visit <https://www.elsevier.com/languageediting> or our customer support site at service.elsevier.com for more information.

Manuscripts which are not written in fluent English will be rejected automatically without refereeing.

Submit your article

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

Referees

Please submit, with the manuscript, the names, addresses and e-mail addresses of 5 potential referees. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

PREPARATION

NEW SUBMISSIONS

Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process.

As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

Please note that the instructions related to Units still apply to all new submissions.

Nomenclature

Nomenclature should conform to current scientific usage. Author(s) should use systematic names similar to those used by Chemical Abstracts Service and the International Union of Pure and Applied Chemistry. Chemical Abstracts (CA) nomenclature rules can be found in Appendix IV of the Chemical Abstracts Index Guide.

IUPAC Guidelines for Polymer Nomenclature

Authors are invited to follow IUPAC recommendations for naming and drawing polymers. A two-page guide is available here: http://www.iupac.org/nc/home/projects/project-db/project-details.html?tx_wfqbe_pi1%5Bproject_nr%5D=2

Introduction

For full-length manuscripts, a proper *introduction* is required. The purpose of the introduction is to briefly summarise previous work and recent progress in the field and not to repeat information found in previous publications. The introduction must be kept to a minimum length and only references that pertain to the information in the manuscript should be used. For shorter articles, introductions should be correspondingly brief.

The title should be concise, informative and representative of the contents of the manuscript.

Abstract

An abstract of approximately 100 to 150 words identifying the new and significant results of the study must be provided for all manuscripts, including articles, reviews, and communications. The abstract should comprise a brief and factual account of the contents and conclusions of the paper as well as an indication of any new information presented and its relevance. Abstracts should be self-contained. References to formulae, equations or references that appear in the main text are not permissible.

Graphical Abstract

In addition to the Abstract, which will appear at the beginning of the text, the author should provide a graphical abstract (TOC). The TOC graphic should capture the reader's attention and, in conjunction with the manuscript title, should give the reader a quick visual impression of the essence of the paper. It should be in the form of a structure, graph, drawing, TEM/SEM/AFM micrograph, or reaction scheme without any added text. Tables or spectra are not acceptable. Color is encouraged. Type size of labels, formulas, or numbers within the graphic must be legible. The graphic should be submitted as a separate file in either TIFF, JPG, Word, or Powerpoint format.

Experimental

The *experimental* section should provide sufficient detail of the materials, methods and equipment to allow repetition of the work elsewhere, but should not contain excessive detail of commonly used procedures. Precautions for handling dangerous material or for performing hazardous procedures should be explicitly stated.

References

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.

Formatting requirements

There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions.

If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.

Divide the article into clearly defined sections.

Figures and tables embedded in text

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file. The corresponding caption should be placed directly below the figure or table.

Peer review

This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. [More information on types of peer review.](#)

REVISED SUBMISSIONS

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 <https://www.elsevier.com/artworkinstructions>.

Authors should be encouraged to submit their supplementary data in PDF format and include a note at the end of the manuscript with a link to the materials free of charge.

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".

The main text should include introduction, experimental section, results, discussion and conclusion. All footnotes (except for table footnotes) should be identified with superscript Arabic numbers. Headings and subheadings for different sections of the papers should be used and clearly identified. If each section needs to be numbered, a sequence such as 2., 2.1., 2.1.1., etc should be used. All tables and figures must be mentioned in the text. Trade names should have an initial capital letter.

Math formulae

Detailed mathematical discussion should be placed in an appendix. Equations and formulae should be typewritten.

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. Please note that the conclusions should not repeat the summary.

Color artwork

Please make sure that artwork files are in an acceptable format (TIFF, EPS 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 on the Web (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 on the Web only. For further information on the preparation of electronic artwork, please see <https://www.elsevier.com/artworkinstructions>.

Please note: Because of technical complications which 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.

Use of word processing software

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the [Guide to Publishing with Elsevier](#)). 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

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.

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. You can add your name between parentheses in your own script behind the English transliteration. 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. This responsibility includes answering any future queries about Methodology and Materials. **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.

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). You can view [example Highlights](#) on our information site.

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.).

Formatting of funding sources

List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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.

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article.

Artwork

Electronic artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.

- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Indicate per figure if it is a single, 1.5 or 2-column fitting image.
- For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
- Please note that individual figure files larger than 10 MB must be provided in separate source files. A detailed [guide on electronic artwork](#) is available.

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

Formats

Regardless of the application used, 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 the font or save the text as 'graphics'.

TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.

TIFF (or JPG): Bitmapped line drawings: use a minimum of 1000 dpi.

TIFF (or JPG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

Please do not:

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
- Supply files that are too low in resolution.
- Submit graphics that are disproportionately large for the content.

Figure captions

Ensure that each illustration has a caption. 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.

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.

Data references

This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

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](#), such as [Mendeley](#). Using citation 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. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. [More information on how to remove field codes from different reference management software](#).

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:

<http://open.mendeley.com/use-citation-style/polymer>

When preparing your manuscript, you will then be able to select this style using the Mendeley plugins for Microsoft Word or LibreOffice.

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. <https://doi.org/10.1016/j.Sc.2010.00372>.

Reference to a journal publication with an article number:

[2] Van der Geer, J., Hanraads, J.A.J., Lupton, R.A., 2018. The art of writing a scientific article. *Heliyon.* 19, e00205. <https://doi.org/10.1016/j.heliyon.2018.e00205>.

Reference to a book:

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

Reference to a chapter in an edited book:

[4] 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.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

Reference to a dataset:

[dataset] [6] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

Journal abbreviations source

Journal names should be abbreviated according to the [List of Title Word Abbreviations](#).

Video

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 file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including [ScienceDirect](#). 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](#). 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.

Data visualization

Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions [here](#) to find out about available data visualization options and how to include them with your article.

Research data

This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the [research data](#) page.

Data linking

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the [database linking page](#).

For [supported data repositories](#) a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley Data

This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. Before submitting your article, you can deposit the relevant datasets to *Mendeley Data*. Please include the DOI of the deposited dataset(s) in your main manuscript file. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the [Mendeley Data for journals page](#).

Data in Brief

You have the option of converting any or all parts of your supplementary or additional raw data into one or multiple data articles, a new kind of article that houses and describes your data. Data articles ensure that your data is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You are encouraged to submit your article for *Data in Brief* as an additional item directly alongside the revised version of your manuscript. If your research article is accepted, your data article will automatically be transferred over to *Data in Brief* where it will be editorially reviewed and published in the open access data journal, *Data in Brief*. Please note an open access fee of 500 USD is payable for publication in *Data in Brief*. Full details can be found on the [Data in Brief website](#). Please use [this template](#) to write your Data in Brief.

Data statement

To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the [Data Statement page](#).

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. The correct format for citing a DOI is shown as follows (example taken from a document in the journal *Physics Letters B*):

<https://doi.org/10.1016/j.physletb.2003.10.071>

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

The correct hyperlink to the DOI above is: <https://doi.org/10.1016/j.physletb.2003.10.071>

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 will, at no cost, receive a customized [Share Link](#) providing 50 days free access to the final published version of the article on [ScienceDirect](#). The Share Link can be used for sharing the article via any communication channel, including email and social media. 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](#). Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

AUTHOR INQUIRIES

Visit the [Elsevier Support Center](#) to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch.

You can also [check the status of your submitted article](#) or find out [when your accepted article will be published](#).

© Copyright 2018 Elsevier | <https://www.elsevier.com>