# Description

**Current Opinion in Colloid and Interface Science** (COCIS) is an international journal focused on the science related to interfaces and on the behavior of colloids and amphiphiles (surfactants, polar lipids, polymers and biopolymers) in solution. The journal also encompasses molecular and nanoscopic aspects of materials science, industrial applications of colloids, and biologically-relevant systems. COCIS is not a primary journal; rather it seeks to guide the researcher through the maze of current published literature, and to highlight areas and papers which, in the opinion of the reviewers, are of special interest and significance. Topics covered include: Theories and Simulations, Microscopy Methods, NMR, X-ray and Neutron Scattering, Surface Analysis Techniques, Emulsions and Microemulsions, Liquid Crystals, Thin Films and Foams, Polyelectrolytes, Reactivity in Colloidal Systems and at Interfaces, Surfactants, Food Colloids, Biological Colloids and Interfaces, Colloidal Dispersions, Self Assembly, Drug Delivery, Electrokinetics, Rheology, and, Wetting and Spreading.

For each of the above areas, **Section Editors** have been appointed, who will commission expert scientists to write an informed and critical article on a topic within that general field. The article is not intended to be a comprehensive compilation of the recent relevant literature, but rather is a personal article by the contributor(s), which sets out to both inform the reader of the major developments in the area, and to identify those papers which in the opinion of the author(s), have made the greatest impact on the field. Normally, the period covered by the review will be the previous two to three years.

# Audience

Chemical Engineers, Physical Chemists.

# Impact Factor

2018: 6.271 © Clarivate Analytics Journal Citation Reports 2019
ABSTRACTING AND INDEXING

Scopus
Advanced Polymers Abstracts
METADEX
Applied Polymers Literature
APOLLIT
Ceramics Technology Digest
Chemical Abstracts
Chemistry Citation Index
Composites Industry Abstracts
Current Contents - Physical, Chemical & Earth Sciences
Engineered Materials Abstracts
Embase
Materials Science Citation Index
Metals Abstracts
Web of Science
INSPEC

EDITORIAL BOARD

Editors-in-Chief
Nicholas Abbott, Cornell University School of Chemical and Biomolecular Engineering, Ithaca, New York, United States
Marie Pierre Krafft, University of Strasbourg, Strasbourg, France

Biological Colloids and Interfaces
Martin Malmsten, University of Copenhagen Department of Pharmacy, København, Denmark
Stefan Zauscher, Duke University, Durham, North Carolina, United States

Drug Delivery
Julie Champion, Georgia Institute of Technology, Atlanta, Georgia, United States
Rita Vanbever-Zaman, Catholic University of Louvain, Louvain-la-Neuve, Belgium

Electrokinetics
Martin Z. Bazant, Massachusetts Institute of Technology, Cambridge, Massachusetts, United States
Carsten Werner, Leibniz Institute for Polymer Research, Dresden, Germany

Emulsions and Microemulsions
Kenji Aramaki, Yokohama National University, Yokohama, Japan
Carlos Rodriguez Abreu, Institute of Advanced Chemistry of Catalonia, Barcelona, Spain

Food Colloids
Martin Leser, Nestle Research Center, Lausanne 26, Switzerland
Brent Murray, University of Leeds, Leeds, United Kingdom

Formulations and Cosmetics
Samiul Amin, Manhattan College, Riverdale, New York, United States
Eliana B. Souto, University of Coimbra, Coimbra, Portugal

Microscopy Methods
Dganit Danino, Technion Israel Institute of Technology, Haifa, Israel

NMR
Bradley Chmelka, University of California Santa Barbara, Santa Barbara, California, United States
Anne Lesage, Institute of Analytical Science, Villeurbanne Cedex, France

Particle Systems
Stefano Sacanna, New York University, New York, New York, United States
Patrick Spicer, University of New South Wales, Sydney, New South Wales, Australia
Krassimir Velikov, Unilever Innovation Vlaardingen, Vlaardingen, Netherlands
Polyelectrolytes
Maria Santore, University of Massachusetts Amherst Department of Chemistry, Amherst, Massachusetts, United States

Reactivity in Colloidal Systems and at Interfaces
Faruk Nome †, Federal University of Santa Catarina, Florianópolis, Brazil
Larry Romsted, Rutgers University Department of Chemistry and Chemical Biology, Piscataway, New Jersey, United States

Rheology
Yujun Feng, Sichuan University, Chengdu, Sichuan, China
Erin Koos, KU Leuven Science and Technology Group Department of Chemical Engineering, Heverlee, Belgium

Self Assembly
Alfred Blume, Martin Luther University Halle Wittenberg, Halle, Germany
Junbai Li, Institute of Chemistry Chinese Academy of Sciences, Beijing, China

Special Topics
Nicholas Abbott, Cornell University School of Chemical and Biomolecular Engineering, United States
Marie Pierre Krafft, University of Strasbourg, Strasbourg, France
Thomas Zemb, Institute of Separative Chemistry Marcoule Laboratory of Sonochrome in Complex Fluids, Bagnols sur Ceze, France

Surface Analysis Techniques
Libero Liggieri, Institute for Educational Technology National Research Council, Genova, Italy
Reinhard Miller, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

Surface Forces
Per Claesson, Royal Institute of Technology, Stockholm, Sweden
William Ducker, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, United States

Surfactants
Romain Bordes, Chalmers University of Technology, Goteborg, Sweden
Yilin Wang, Chinese Academy of Sciences, Beijing, China

Theory and Simulation
Zbigniew Adamczyk, Polish Academy of Sciences Institute of Catalysis and Surface Chemistry, Krakow, Poland
Nily Dan, Drexel University, Philadelphia, Pennsylvania, United States

Thin Liquid Films and Foams
Sibani Lisa Biswal, Rice University, Houston, Texas, United States
Raymond Dagastine, The University of Melbourne Melbourne School of Engineering, Melbourne, South Australia, Australia

Wetting and Spreading
Tatiana Gambaryan-Roisman, Darmstadt University of Technology, Darmstadt, Germany
Victor Starov, Loughborough University, Loughborough, United Kingdom

X-Ray and Neutron Scattering
Jeff Penfold, Rutherford Appleton Laboratory, Didcot, United Kingdom
Norman Wagner, University of Delaware, Newark, Delaware, United States

Editor Emeritus
B.H. Robinson †
INTRODUCTION

THIS JOURNAL PUBLISHES INVITED PAPERS ONLY
Please do not submit a paper which has not been commissioned by the Journal.

Current Opinion in Colloid and Interface Science (COCIS) is an international Journal focused on the major areas of colloid/interface/polymer science. The journal also encompasses aspects of materials science, industrial applications of colloids, and biologically-relevant systems. COCIS is not a primary journal; rather it seeks to guide the researcher through the maze of current published literature, and to highlight areas and papers which, in the opinion of the reviewers, are of special interest and significance.

Topics covered include: Theory, Microscopy Methods, NMR, X-ray and Neutron Scattering, Surface Analysis Techniques, Emulsions and Microemulsions, Thin Liquid Films and Foams, Polyelectrolytes, Surfactants, Food Colloids, Biological Colloids and Interfaces, Colloidal Dispersions, Self Assembly, Drug Delivery, Electrokinetics, Rheology, Particle Systems and Wetting and Spreading.

For each of the above areas, Section Editors have been appointed, who will commission expert scientists to write an informed and critical article on a topic within that general field. The article is not intended to be a comprehensive compilation of the recent relevant literature, but rather is a personal article by the contributor(s), which sets out to both inform the reader of the major developments in the area, and to identify those papers which in the opinion of the author(s), have made the greatest impact on the field. Normally, the period covered by the review will be the previous two to three years.

The review should be approximately 5-10 printed journal pages, incl. figures, tables and references (for your reference one full text journal page is ca. 1,000 words). You should highlight and discuss all interesting developments in your subject focusing on the review period, referring to the most important, relevant published articles. In addition to describing recent trends, you are encouraged to give your subjective opinion of the topics discussed wherever appropriate. We encourage you to include a maximum of six figures, photographs and/or tables with your review.

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

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 conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors should complete the declaration of interest statement using this template and upload to the submission system at the Attach/Upload Files step. If there are no interests to declare, please choose: 'Declarations of interest: none' in the template. This statement will be published within the article if accepted. 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.

Author contributions
For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

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.

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.

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 open access fee for this journal is **$3900**, excluding taxes. Learn more about Elsevier’s pricing policy.

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 (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 Author Services.

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

Peer review
This journal operates a single blind review process. All contributions are typically sent to a minimum of one independent expert reviewer 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.

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). 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.

LaTeX
You are recommended to use the Elsevier article class elsarticle.cls to prepare your manuscript and BibTeX to generate your bibliography.

Our LaTeX site has detailed submission instructions, templates and other information.

Article structure

Subdivision - numbered sections
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Introduction Article Structure
The introduction should describe what you will discuss (the scope of the review), as well as providing some general background to the topics that will be covered in the review, and the time period that will be covered. As a wide variety of scientists read this journal, the introduction should avoid the use of jargon and concepts not familiar to non-specialists. The introduction should include only a few background references.

Main text of the review
The review should be approximately 5-10 printed journal pages, incl. figures, tables and references (for your reference one full text journal page is ca. 1,000 words). You should highlight and discuss all interesting developments in your subject focusing on the review period, referring to
the most important, relevant published articles. In addition to describing recent trends, you are encouraged to give your subjective opinion of the topics discussed wherever appropriate. We encourage you to include a maximum of six figures, photographs and/or tables with your review.

Conclusions
The conclusion should summarize the topics discussed, i.e. the major findings, as well as describing future directions.

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 lowercase 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 optional yet highly encouraged for this journal, as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights 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).

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 be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

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 x 1328 pixels (h x w) or proportionally more. The image should be readable at a size of 5 x 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

Authors can make use of Elsevier's Illustration Services to ensure the best presentation of their images and in accordance with all technical requirements.

Abbreviations
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.
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.

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 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
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 summarize 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.
• Ensure that color images are accessible to all, including those with impaired color vision.
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**

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. Further information on the preparation of electronic artwork.

**Illustration services**

Elsevier's Author Services offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

**Figure captions**

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

**Tables**

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

**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.

**Reference links**

Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.
A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambhe W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

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:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:

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:

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 or articles (including papers on preprint servers, 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): Personal communications: (SW Churchill et al., personal communication [or unpublished if referring to the authors' own work]). Note that personal communications must be authorised by those involved. You are responsible for obtaining permission to use personal communications. Submitted papers/unpublished data: (IMN Author et al., unpublished) or (IMN Author et al., bioRxiv doi: 10.1101/123456) Abstracts (give full information but not title): (A Early et al., abstract 54, 3rd International Meeting of Cellular

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.

Supplementary material
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

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

Offprints
The corresponding author 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 Author Services. 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