INTRODUCTION

Actas Dermo-Sifiliográficas is the official publication of the Spanish Academy of Dermatology and Venereology (AEDV). Founded by Juan de Azúa in 1909, it is the longest-standing monthly Spanish medical journal. The journal is dedicated to articles on scientific research and continuing education with subjects related to medical-surgical dermatology and venereology. The journal is published in Spanish in its printed version and in Spanish and English in its on-line edition.

We suggest that articles by Spanish authors should comply with the general criteria of Law 14/2007, from 3rd July, for biomedical research (BOE n 159), which protects the rights of individuals who are subjects of research. Clinical assays should be registered with public databases prior to their initiation and patient recruitment, and only after approval of the institutional or regional Clinical Research Ethics Committee. The authors should provide the archive number and database where the assay is registered. For all clinical assays that initiate patient recruitment as of 1 January 2017, registration in public databases will be mandatory. Assays with patient recruitment prior to this date may still be submitted to the Journal for evaluation.

Types of article

Originals. This section includes original works of clinical and basic research. The recommended designs are experimental studies (clinical trials), analytic observational (case-control and cohorts) or descriptive ones (cross-sectional). To elaborate the clinical trials, must follow the CONSORT standards, available under http://www.stard-statement.org/ the STARD initiative for diagnostic tests, available under http://www.stard-statement.org/ and for observational studies the STROBE guidelines available under http://www.strobe-statement.org/.

For single-centre studies, it is recommended that the number of signatories not exceed 6. More authors maybe considered for multicentre studies. In any case, each author’s contribution to the manuscript must be specified. The maximum word count is 2500 words (excluding the title page, abstract, references, tables and figure legends). Up to 30 references, 6 figures and 6 tables will be accepted. These requirements may only be changed in exceptional situations and with prior permission from the Editor. For online publishing only, it is recommended that the authors submit all tables, figures and methodology that are not essential for understanding the study but that are useful for replicating the study or for a more thorough reading of it. The manuscript should be structured into sections.

Images in Dermatology. To be considered for publication, images must be high quality originals that reflect the clinical characteristics of dermatological diseases or the results of additional tests in dermatology and have significant teaching value (either due to their...
uniqueness or visual impact), which must be noted in the accompanying text. The image presented must be unique, although it may be composed of up to 2 photographies and shall be accompanied by a legend no longer than 200 words, with no associated references or abstract. The title should be brief (no more than 10 words), and it is recommended that no more than 3 authors be included. The images will be published on hardcopy or in electronic format at the discretion of the Journal’s Editorial Committee.

**Brief Communications.** This section is for papers with short patient series or long series that validate the results of other papers, as well as brief research papers. In the case of a study, the paper must follow the recommendations on style and design of the original articles. It should include an unstructured abstract of a maximum 150 words and keywords. The maximum text length must be 1,500 words (excluding title page, abstract, references, tables and figure captions). Up to 2 figures and/or tables and a maximum of 20 references will be accepted. The manuscript must be structured to include the following main headings: a) abstract (summary of most relevant findings); b) text with sequential sections: introduction, clinical cases/patients and method, results, discussion, and c) references. This section will appear in the electronic version of *Actas Dermo-Sifiliográficas*.

**Cases for diagnosis.** These manuscripts should include original clinical cases that have not been published previously in another journal. One to 3 authors will be allowed. Do not include an abstract. Key words are required. These manuscripts should include:

1. **A first part (case presentation)** with up to 200 words that can fit on a single printed page. This part should contain the following: a) the case history; b) physical examination; c) histopathology (that describes the histologic findings but does not give conclusive information about the diagnosis); d) complementary tests; e) figures of best possible quality, in color (maximum 3): these may be clinical, histologic, dermatoscopic,... with no figure captions (their meaning should be described in the text).

2. **Second part (diagnosis and comments).** Up to 450 words, excluding references, in order to be fitted in one printed page. This part should include: a) the diagnosis; b) course and treatment (of the patient presented); c) comments (on the reference disease, the case presented, and the differential diagnosis); d) references (up to 6 references).

**Case and Research Letters.** This Section is for publication of brief reports on studies or clinical cases. From 1 to 4 authors. The text can be up to 800 words. No abstract. Include key words. Up to 3 figures and/or tables. Up to 10 references.

**Letters to the editor.** This Section is for publishing critical opinions, agreements, praise or any other type of observation regarding articles published in the journal. This section can also be used for suggestions, criticism, or comments about any formal aspect or content of the issue of *Actas Dermo-Sifiliográficas*. From 1 to 4 authors are allowed. Do not include abstract. Include key words. The maximum length of text allowed is 800 words with up to 3 figures and/or tables and up to 10 references.

**Opinion article.** It includes the opinion of the author on a subject of his/her specialty, giving his/her personal thoughts on it, with the possibility of referring to related publications. One or two authors can be included. Do not include a abstract. Include key words. It is not generally divided into sections. References may be included. It may have an extension of 1250-2500 words not counting the references.

**Review.** Reviews update a topic of dermatological importance, reviewing it in depth based on updated quality scientific evidence. From 1 to 3 authors The length shall not exceed 3,500 words (excluding the title page, abstract, references, tables and figure legends) and a
maximum of 100 references. Includes an unstructured abstract (maximum 150 words) and keywords. The reviews will be conducted at the express request of the Journal’s Editorial Committee or by a previous request from the author to the director (directoractas@aedv.es) and will be subjected to a peer review. As part of the Continuing Medical Education program the authors will be requested to prepare 4 multiple-choice questions, whose standards of preparation will be detailed along with the request. Reviews that include recommendations on procedures and/or preventive, diagnostic and/or therapeutic techniques shall include the level of evidence and degree of recommendation following the SIGN, Oxford or NICE classification systems. As well as general reviews, the journal Actas Dermo-Sifiliográficas publishes reviews on issues related to clinical practice, controversies and developments, with the following standards for authors.

**Practical dermatology.** A review article on a topic with an eminently practical approach. Avoid an extensively long development of the work, orienting the subject towards recommendations for the daily clinical practice. Include from 1 to 3 authors. Length up to 2500 words (excluding the title page, abstract, references, tables, and figure captions). Include a non-structured (up to 150 words) and include key words. Use of figures, graphics, tables, or algorithms is recommended to facilitate the understanding of the topic. These articles are commissioned expressly by the Editor-in-Chief or by prior request of the author to the Editor (directoractas@aedv.es) and will be subjected to peer review and as part of the Continuing Medical Education program the authors will be requested to prepare 4 multiple-choice questions, whose standards of preparation will be detailed along with the request. The level of evidence of the recommendations as described for general reviews will be included.

**Controversies in dermatology.** These are review articles on a topic that has some controversial aspects. The author should give some personal criteria and cover the different positions found in the literature. Include from 1 to 3 authors. Maximum length should be up to 3,700 words (excluding the title page, abstract, references, tables, and figure captions). Include a non-structured abstract (up to 150 words) and key words. Use of figures or tables is recommended if they facilitate the understanding of the topic. These articles are commissioned expressly by the Editor-in-Chief or by prior request of the author to the Editor (directoractas@aedv.es) and will be subjected to peer review. As part of the Continuing Medical Education program the authors will be requested to prepare 4 multiple-choice questions, whose standards of preparation will be detailed along with the request.

**Novelties in Dermatology.** These are articles in which a subject of great current interest is reviewed and briefly commented on. Include from 1 to 3 authors. Maximum length should be up to 2,500 words (excluding the title page, abstract, references, tables, and figure captions). Include a non-structured abstract (maximum 150 words) and key words. These articles are commissioned expressly by the Editor-in-Chief or by prior request of the author to the Editor (directoractas@aedv.es) and will be subjected to peer review. As part of the Continuing Medical Education program the authors will be requested to prepare 4 multiple-choice questions, whose standards of preparation will be detailed along with the request.

**Consensus statements.** These articles cover the content of consensus statements, recommendations, and therapeutic or diagnostic guidelines drafted by a working group or a scientific society. Include a non structured abstract (up to 150 words) and key words.

**History and humanities in dermatology.** These are review articles on the history or humanities related to dermatology and venereology. A maximum length up to 1500 without abstract. We admit 3 figures/tables and 10 references. These articles are commissioned expressly by the Editor-in-Chief or by prior request of the author to the Editor.
Practical Dermoscopy. This Section is dedicated to the publication of clinical-dermatoscopic cases. Includes clinical cases whose clinical diagnosis is difficult and in which dermoscopy provides the diagnostic key. Include from 1 to 3 authors. Do not include an abstract. The practical dermoscopy should include: 1. Case presentation: include a two clinical imaging study, brief descriptive text without giving the diagnostic. 2. Dermoscopic images presentation: two dermoscopic images should be accompanied by the question “What is the diagnosis?”. 3. Comment: should be no longer than 400 words, excluding the references. Includes dermatoscopic feature description emphasizing the differential diagnosis keys. References: no more than 6.

Videos of Surgical Procedures in Dermatology. Will focus on the use of innovative surgical techniques and modifications to existing ones for the resolution of clinical cases as well as the use of known surgical techniques to solve clinical complex cases. Include from 1 to 4 authors. Extension up to 800 words (excluding title page, references, tables and figure captions). Do not include abstract. Include key-words. Figures and tables (maximum 3 figures and / or tables) should be embedded in the video stream. References (no more than 5) at the end of the manuscript and video stream. The manuscript should be structured into the following sections: introduction, surgical technique description, indications/contraindications, complications, conclusions and references. The link to the video will be placed at the foot of the manuscript. Video lasts up to 10 minutes. Surgical video will show complete surgery procedure from baseline to final outcome. It is recommended to include video footage or images of final postsurgical outcomes medium- to long term. To improve the understanding of the procedure described, short and clear commentaries (audio or subtitles) should be incorporated into the video file. Submit videos according to the following acceptable file formats: .mov, .wmv, .mpg, .mpeg, .mp4 or .avi, and maximum file size of 50 MB. Verify that the videos are viewable in QuickTime® or Windows Media Player®. Editorial board of Actas Dermo-Sifiliográficas reserves the right to edit videos according to editorial line the journal. Accepted videos will be posted for viewing via streaming on http://ees.elsevier.com/ad, and its manuscript will be published in the print version of the journal.

Forum. This section, which includes two manuscripts in each issue, is aimed at collecting short bibliographic reviews written by Dermatology Medical-Surgical and Venereology resident physicians who are aspiring academics to the Spanish Academy of Dermatology and Venereology (AEDV). These reviews will be assigned after contact is made with their representatives in the AEDV Board of Directors. Each review will cover a subject considered to be of maximum interest and current, based on 2 to 4 fundamental bibliographic references. It can include a maximum of 3 authors (all of them resident physicians in dermatology). The manuscript title must include the prefix “RF-“ followed by the review subject. Do not include a summary. Include key words. Maximum length of the text permitted is 500 words. In exceptional cases, a maximum of 1 figure and/or table will be accepted. The bibliography should include 3-4 references, from PubMed indexed journals in relation with the subject of the original article commented. The articles of this section will be written on request of the section coordinators.

Supplements. The aim of the supplements is to provide more detailed information on a monographic subject. The supplements will have a Coordinator and different authors who will collaborate in drafting the corresponding articles. These articles will be reviewed in the same way as regular articles. These articles are commissioned expressly by the Editor-in-Chief or by prior request of the coordinator to the Editor (directoractas@aedv.es). Funding is required for the publication of these supplements. They must follow the same publication guidelines as
Contact details for submission
All manuscripts must be submitted online through the Actas Dermo-Sifiliográficas EES Web site at http://ees.elsevier.com/ad

Page charges
This journal has no page charges.

Language
This journal is published in Spanish and in English language.

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)
• Relevant declarations of interest have been made
• 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.

Human and animal rights
If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical
Association (Declaration of Helsinki) for experiments involving humans; Uniform Requirements for manuscripts submitted to Biomedical journals. Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Institutes of Health guide for the care and use of Laboratory animals (NIH Publications No. 8023, revised 1978) and the authors should clearly indicate in the manuscript that such guidelines have been followed.

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. If there are no conflicts of interest then please state this: ‘Conflicts of interest: none’. 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 or as part of a published lecture or academic thesis or as an electronic preprint, see ‘Multiple, redundant or concurrent publication’ section of our ethics policy 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 CrossCheck.

Authorship
All authors should have made substantial contributions to all of the following: (1) the conception and design of the study, or acquisition of data, or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

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.
Clinical trial results
In line with the position of the International Committee of Medical Journal Editors, the journal will not consider results posted in the same clinical trials registry in which primary registration resides to be prior publication if the results posted are presented in the form of a brief structured (less than 500 words) abstract or table. However, divulging results in other circumstances (e.g., investors' meetings) is discouraged and may jeopardise consideration of the manuscript. Authors should fully disclose all posting in registries of results of the same or closely related work.

Reporting clinical trials
Randomized controlled trials should be presented according to the CONSORT guidelines. At manuscript submission, authors must provide the CONSORT checklist accompanied by a flow diagram that illustrates the progress of patients through the trial, including recruitment, enrollment, randomization, withdrawal and completion, and a detailed description of the randomization procedure. The CONSORT checklist and template flow diagram are available online.

Registration of clinical trials
Registration in a public trials registry is a condition for publication of clinical trials in this journal in accordance with International Committee of Medical Journal Editors recommendations. Trials must register at or before the onset of patient enrolment. The clinical trial registration number should be included at the end of the abstract of the article. A clinical trial is defined as any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects of health outcomes. Health-related interventions include any intervention used to modify a biomedical or health-related outcome (for example drugs, surgical procedures, devices, behavioural treatments, dietary interventions, and process-of-care changes). Health outcomes include any biomedical or health-related measures obtained in patients or participants, including pharmacokinetic measures and adverse events. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) will not require registration.

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.

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.

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.

Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our green open access page for further information. 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 12 months.

Elsevier Publishing Campus
The Elsevier Publishing Campus (www.publishingcampus.com) is an online platform offering free lectures, interactive training and professional advice to support you in publishing your research. The College of Skills training offers modules on how to prepare, write and structure your article and explains how editors will look at your paper when it is submitted for publication. Use these resources, and more, to ensure that your submission will be the best that you can make it.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop.

Informed consent and patient details
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author and copies of the consents or evidence that such consents have been obtained must be provided to Elsevier on request. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals. Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary
materials (including all illustrations and videos) must be removed before submission.

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

Submit your article
Please submit your article via http://ees.elsevier.com/ad

Referees
Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our Support site. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

PREPARATION

Peer review
This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then 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.

Double-blind review
This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:

Title page (with author details): This should include the title, authors' names and affiliations, and a complete address for the corresponding author including an e-mail address.

Blinded manuscript (no author details): The main body of the paper (including the references, figures, tables and any Acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

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.
**Article structure**

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

**Introduction**
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

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

**Results**
Results should be clear and concise.

**Discussion**
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Conclusions**
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

**Appendices**
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

**Essential title page information**
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors’ affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article
was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Structured abstract**
A structured abstract, by means of appropriate headings, should provide the context or background for the research and should state its purpose, basic procedures (selection of study subjects or laboratory animals, observational and analytical methods), main findings (giving specific effect sizes and their statistical significance, if possible), and principal conclusions. It should emphasize new and important aspects of the study or observations.

The headings will consist of: «Introduction and Objectives», «Patients or Materials and Methods», «Results» y «Conclusions».

**Graphical abstract**
Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view [Example Graphical Abstracts](#) on our information site. Authors can make use of Elsevier's Illustration and Enhancement service to ensure the best presentation of their images and in accordance with all technical requirements: [Illustration Service](#).

**Highlights**
Highlights are a short collection of bullet points that convey the core findings of the article. Highlights are optional 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.

**Keywords**
Immediately after the abstract, provide a maximum of 6 keywords, using British spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**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.

Artwork

Image manipulation
Whilst it is accepted that authors sometimes need to manipulate images for clarity, manipulation for purposes of deception or fraud will be seen as scientific ethical abuse and will be dealt with accordingly. For graphical images, this journal is applying the following policy: no specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast, or color balance are acceptable if and as long as they do not obscure or eliminate any information present in the original. Nonlinear adjustments (e.g. changes to gamma settings) must be disclosed in the figure legend.

Electronic artwork
General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the published version.
• Submit each illustration as a separate file.
A detailed guide on electronic artwork is available. 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 WebShop 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 encouraged.

A DOI can be used to cite and link to electronic articles where an article is in-press and full citation details are not yet known, but the article is available online. 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., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, http://dx.doi.org/10.1029/2001JB000884i. Please note the format of such citations should be in the same style as all other references in the paper.

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. This identifier will not appear in your published article.

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

Reference management software
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 and Zotero, as well as EndNote. Using the word processor plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide.

**Reference style**

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

List: Number the references 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:

Note shortened form for last page number. e.g., 51–9, and that for more than 6 authors the first 6 should be listed followed by 'et al.' For further details you are referred to 'Uniform Requirements for Manuscripts submitted to Biomedical Journals' (J Am Med Assoc 1997;277:927–34)(see also Samples of Formatted References).

**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 files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. 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
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 Webshop. Corresponding authors who have published their article 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.