DESCRIPTION

HeartRhythm Case Reports provides rapid online electronic publication of the most important current case reports, illustrations, and educational vignettes in the field of cardiac arrhythmias and electrophysiology. The Journal publishes case reports and series devoted to the diagnosis and treatment of heart rhythm disorders, as well as the electrophysiology of the heart and blood vessels. All articles are peer-reviewed. The Journal is published online only with open access.

ABSTRACTING AND INDEXING

Directory of Open Access Journals (DOAJ)

EDITORIAL BOARD

Editor-in-Chief
T. Jared Bunch, Intermountain Medical Center Heart Institute, Murray, UT, United States

Senior Director, HRS Publications; Managing Editor
Lori Monteleone

Online Editor
Daniel P. Morin, Ochsner Heart and Vascular Institute, Ochsner Medical Center, New Orleans, LA, United States

Associate Online Editor
Edward J. Schloss, THE CHRIST HOSPITAL, Cincinnati, OH, United States

Section Editors
Rakesh Gopinathannair, University of Louisville, University of Louisville, Louisville, KY, United States
Joel E. Herbrandson, Mayo Clinic Rochester, Rochester, MN, United States
Matthew W. Martinez, Lehigh Valley Health Network, Lehigh Valley Health Network, Allentown, PA, United States
Christina Y. Miyake, Texas Children’s Hospital, Texas Children’s Hospital, Houston, TX, United States
Yasuo Okumura, Nihon University, Nihon University School of Medicine, Tokyo, Japan
Roderick Tung, University of Chicago, University of Chicago, Chicago, IL, United States

Editorial Board Members
Dominic J. Abrams, Boston Children’s Hospital, Boston, MA, United States
Luis Aguinaga, Centro Privado De Cardiologia, Tucumán, Argentina
Nazem Akoum, University of Washington, Seattle, WA, United States
Amin Al-Ahmad, Texas Cardiac Arrhythmia Institute, Austin, TX, United States
Ryan G. Aileen, University of Colorado Hospital, Aurora, CO, United States
Alawi A. Alsheikh-Ali, Sheikh Khalifa Medical City, Dubai, United Arab Emirates
Gregory T. Altemose, Lehigh Valley Health Network, Allentown, PA, United States
Arash Aryana, Mercy General Hospital, Dignity Health Heart and Vascular Institute, Sacramento, CA, United States
Samuel J. Asirvatham, Mayo Clinic Rochester, Rochester, MN, United States
Joseph Atallah, University of Alberta, Edmonton, Alberta, Canada
Jason S. Bradfield, University of California Los Angeles, Los Angeles, CA, United States
Jennifer L. Busch, Intermountain Medical Center, Murray, UT, United States
Leonardo Caló, Policlinico Casilino, Rome, Italy
Marina Cerrone, NEW YORK UNIVERSITY SCHOOL OF MEDICINE, New York, NY, United States
Lin Y. Chen, University of Minnesota Medical School Twin Cities, Minneapolis, MN, United States
Mingleng Chen, Nanjing Medical University, Nanjing, China
Christine C. Chiu-Man, Hospital for Sick Children, Toronto, ON, Canada
Eugene H. Chung, University of Michigan, Ann Arbor, MI, United States
William T. Clusin, Stanford Medicine, Stanford, CA, United States
Joshua M. Cooper, TEMPLE UNIVERSITY HEALTH SYSTEM, Philadelphia, PA, United States
Michael J. Cutler, Intermountain Heart Rhythm Specialists, Salt Lake City, UT, United States
Marcos Daccarett, UNIVERSITY OF UTAH, Salt Lake City, UT, United States
Dan Dan, MCKAY-DEE HOSPITAL CENTER, Ogden, UT, United States
Dawood Darbar, University of Illinois at Chicago, Chicago, IL, United States
Roberto De Ponti, University of Insubria, Varese, Italy
Luigi Di Biase, Yeshiva University Albert Einstein College of Medicine, Austin, TX, United States
Chunhua Ding, Guangdong Hospital of Traditional Chinese Medicine, Guangzhou, China
Anne M. Dubin, Stanford University, Stanford, CA, United States
Jonathan Dukes, University of California San Francisco, San Francisco, CA, United States
Frank Eberhardt, Kalk Protestant Hospital, Köln, Germany
Lee L. Eckhardt, University of Wisconsin Madison, Madison, WI, United States
Susan P. Etheridge, UNIVERSITY OF UTAH, Salt Lake City, UT, United States
Paul A. Friedman, Mayo Foundation for Medical Education and Research, Rochester, MN, United States
Akira Fujiki, Shizuoka General Hospital, Shizuoka, Japan
David G. Gamboa, Advocate Children's Hospital, Oak Lawn, IL, United States
Ilan Goldenberg, Chaim Sheba Medical Center, Tel Aviv, Israel
Frederick T. Han, University of Utah Health Sciences Center, Salt Lake City, UT, United States
Norbert M. van Hemel, Sint Antonius Hospital, Nieuwegein, Netherlands
Benhur D. Henz, Instituto Brasilia de Arritmia, Brasilia, Brazil
James E. Ip, Cornell University, Ithaca, NY, United States
Victoria Jacobs, Intermountain Heart Institute, Salt Lake City, UT, United States
Chen-yang Jiang, Zhejiang University, Hangzhou, China
Maurice Khoury, American University of Beirut, Beirut, Lebanon
Young-Hoon Kim, Korea University Medical Center, Seoul, Korea
Joel A. Kirsh, Hospital for Sick Children, Toronto, ON, Canada
Saurabh Kumar, BRIGHAM WOMENS HOSPITAL, Australia
Dhanunjaya R. Lakkireddy, UNIVERSITY OF KANSAS MED CTR, Kansas City, KS, United States
Chu-Pak Lau, University of Hong Kong, Hong Kong, China
Ian H. Law, University of Iowa, Iowa City, IA, United States
Luiz R. Leite, Hospital de Base DF, Brasilia, Brazil
Jiunn-Lee Lin, National Taiwan University, Taiwan
Xiaoke Liu, Borgess Medical Center, Kalamazoo, MI, United States
Martin Lowe, The Heart Hospital, London, United Kingdom
Rajiv Mahajan, Royal Adelaide Hospital, Adelaide, SA, Australia
Manlio F. Márquez, Ignacio Chavez National Institute for Cardiology, Mexico City, Mexico
Nassir F. Marrouche, University of Utah Health Sciences Center, Salt Lake City, UT, United States
Christopher J. McLeod, Mayo Foundation for Medical Education and Research, Rochester, MN, United States
Suneet Mittal, VALLEY HOSPITAL, Ridgewood, New Jersey, United States
Shinsuke Miyazaki, University of Fukui, Fukui, Japan
Harry G. Mond, Royal Melbourne Hospital, Australia
Jeremy P. Moore, Ronald Reagan UCLA Medical Center, Los Angeles, CA, United States
Shiro Nakahara, Dokkyo Medical University, Japan
Takashi Noda, National Cerebral and Cardiovascular Center, Suita, Japan
Rajeev K. Pathak, University of Pennsylvania, Philadelphia, PA, United States
Thomas Paul, University of Gottingen, Germany
Nicholas S. Peters, Saint Mary’s Hospital, London, United Kingdom
Evgeny A. Pokushalov, State Research Institute of Circulation Pathology, Novosibirsk, Russia
GUIDE FOR AUTHORS

HeartRhythm Case Reports provides rapid online electronic publication of the most important current case reports, illustrations, and educational vignettes in the field of cardiac arrhythmias and electrophysiology. Submissions are encouraged from all professionals that participate in the care and management of heart rhythm disorders. The Journal publishes case reports and series devoted to the diagnosis and treatment of heart rhythm disorders, as well as the electrophysiology of the heart and blood vessels. All articles are peer-reviewed, and the Journal is published online only with open access. Articles from the Editor’s institution are processed by a guest editor.

Manuscripts must be submitted online at http://ees.elsevier.com/hrcr

BEFORE YOU BEGIN

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, frequently under the direction of a section editor with expertise in the manuscript topic. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor’s decision is final. For more information on the types of peer review, please visit: https://www.elsevier.com/reviewers/peer-review

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, http://www.wma.net/en/30publications/10policies/b3/index.html; Uniform Requirements for manuscripts submitted to Biomedical journals, http://www.icmje.org. 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.

In any submission in which an animal model or study is used to confirm the clinical findings of a case report or study, all animal experiments must 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. All animal studies need to ensure they comply with the ARRIVE guidelines. More information can be found at http://www.nc3rs.org.uk/page.asp?id=1357.

Declaration of interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal’s official records. It is important for potential interests to be declared in both places and that the information matches. More information.

The corresponding author must upload a signed HeartRhythm Case Reports conflict of interest form and include the conflicts of all authors on the title page of the article. The HeartRhythm Case Reports conflict form can be found at the following link: http://ees.elsevier.com/hrcr/img/HRCR_conflict_form.docx

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.

Please confirm in the cover letter with your submission that the manuscript is original and that no aspect of the case report, images, or tables has been published elsewhere outside of abstract form for a meeting. Please also confirm that all authors are responsible for the contents and have read and approved the manuscript for submission to Heart Rhythm Case Reports.

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

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.

More than 6 authors must be justified.

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.

Copyright
Copyright to all published articles will be held by the Heart Rhythm Society. Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (for more information see https://www.elsevier.com/OAauthoragreement). Permitted third party reuse of Open Access articles is determined by the author's choice of user license (see https://www.elsevier.com/openaccesslicenses).

Author rights
As an author you (or your employer or institution) have certain rights to reuse your work. For more information on author rights please see https://www.elsevier.com/copyright.

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. After acceptance, open access papers will be published under a noncommercial license. For authors requiring a commercial CC BY license, you can apply after your manuscript is accepted for publication.

**Open access**

This is an open access journal: all articles will be immediately and permanently free for everyone to read and download. To provide open access, this journal has an open access fee (also known as an article publishing charge APC) which needs to be paid by the authors or on their behalf e.g. by their research funder or institution. Permitted third party (re)use is defined by the following Creative Commons user licenses:

**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.

**Open access fee**

The open access publication fee for this journal is **USD 950**, excluding taxes. The open access publication fee is **USD 600** if the corresponding author listed on the title page is a member of the Heart Rhythm Society. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.

**Language (usage and editing services)**

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

**Informed consent and patient details**

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, https://www.elsevier.com/patient-consent-policy. 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 https://www.evise.com/profile/api/navigate/HRCR

**Revision policy**

Revisions should be submitted to the Journal within 2 months of notification of a decision. If more time is needed, please notify the journal office at CRJournal@HRSonline.org.

**Manuscript categories**

**Case Reports**

Submissions are limited to 6 authors and 2500 words, including text, references (15), figure legends, and 3 figures. No abstract should be included. All case reports will be considered. Selection priority will be based upon the reporting of a novel finding or a first of its kind report, a rare presentation of a common condition, a common condition with a rare presentation, a case that demonstrates a series of core educational concepts of electrophysiology.
Clinical Problem Solving (Solicited and Unsolicited)
Submissions are limited to 4-6 authors and 3500 words, including text, references (25), figure legends, and up to 3 figures. No abstract should be included. These manuscripts should include a step-by-step process of clinical decision making. The patient should be presented in stepwise stages allowing commentary as additional information or understanding is obtained.

Images
Submissions to "Electrophysiology Images and Movies" are limited to 4 authors, 1500 words, and no more than 2 figures. No abstract should be included. Figure legends are permitted but should be concise. Up to 5 reference citations are permitted. Images that have educational value for teaching section of the journal will also require that the author submit a pertinent question regarding the educational image and then provide an answer. Authors can also include a single electronic movie (e.g. QuickTime or MPEG1 formats) file or computer animation (e.g. as Power Point file) that expands or enhances the message of the images. Animations or movies must provide novel or especially useful means of conveying known principles (e.g. Animations or movies that effectively teach/portray an electrophysiological mechanism or process). If an electronic movie or animation is submitted, the authors must also provide 1 or 2 frames of images that convey the essence of the movie's content. A movie legend must be submitted as supplemental material.

Electrocardiogram Unknowns
Manuscripts are limited to 1500 words, ≤3 illustrations, ≤4 authors, and ≤5 references. No abstract should be included. The intracardiac electrograms or electrocardiogram should be presented as an unknown. The figures must contain enough information for the reader to make the correct diagnosis. The figure legends should not reveal the correct diagnosis. The cases will be judged based on degree of difficulty, novelty, and teaching value.

Letters to the Editor
Letters should be double-spaced, not exceeding 400 words, including references. Letters will be reviewed and are subject to editing. They should not contain original data or figures. Commentary regarding prior cases or clinical problem-solving manuscripts is encouraged, particularly if it further enhances education.

Allied Professional Section
A separate section of the journal will be dedicated towards Allied Professionals. Allied professionals are encouraged to submit Case Reports, Images, or Clinical Problem Solving manuscripts under the same conditions as described above but to this section. Novelty is not required. The case report, image, or clinical problem should illustrate differential diagnosis and key educational points that are particularly relevant for allied professionals.

My Most Challenging Case
All articles by invitation only.

My Most Difficult Complication
All articles by invitation only.

PREPARATION

Use of word processing software
It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). 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
A brief Introduction section is required for all cases and image submissions. State the objectives of the work and provide an adequate background, avoiding a detailed literature survey.

Case Report
Describe the details of the case.

Discussion
This should explore the significance of the case. Avoid extensive citations and discussion of published literature.

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

Key Teaching Points
Provide a list of the Key Teaching Points from your article. The Key Teaching Points should be brief bullets (each bullet may be up to 2-3 sentences). The Key Teaching Points should be submitted in MS Word format as a separate file, rather than embedded in the main manuscript document. Include a minimum of 3 Key Teaching Points.

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. Do not include trade names in titles.
• Short title. Include a short title of 50 or fewer characters.
• Author names, academic degrees, and affiliations. Please include academic degrees after each author’s name. Fellows of the Heart Rhythm Society (FHRS) should be identified by including FHRS after the degree. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors’ affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author’s name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
• Corresponding author. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that the e-mail address and the complete postal address are provided. Contact details must be kept up to date by the corresponding author. The conflicts of all authors must be included on the title page. If there are no conflicts, please state on the title page that the authors have no conflicts to disclose.
• 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.
• Word count. The total word count should be included on the title page.

Keywords
Immediately after the title page, provide 5-10 keywords, using American 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
Avoid ALL abbreviations other than standard units of measurement and common abbreviations, such as RV, LV, etc. Such abbreviations that are unavoidable should be spelled out at first mention in both the abstract and the text. 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 wordprocessors 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. Do not include footnotes in the Reference list.

Artwork
New: For the ease of reviewers, please include figures and legends at the end of the main manuscript MS Word file. Each legend should appear on the same page as the figure it describes. For revised submissions, please also upload each figure as a separate, high resolution figure file. Acceptable file formats are noted below.

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.
- Size the illustrations close to the desired dimensions of the final, composited version.
- Submit each illustration as a separate file.

A detailed guide on electronic artwork is available on our website: https://www.elsevier.com/artworkinstructions

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

Formats
If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS (or PDF): Vector drawings, embed all used fonts.
TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

**Please do not:**
- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

**Color Artwork**
Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution.

**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**
Number tables consecutively in accordance with their appearance in the text. Each table should be included on a separate page and designed for economy of space and readability. Notes designated in the tables and all abbreviations should be defined in a footnote. Abbreviations should be identified in alphabetical order. Footnotes should be used in the following order: †, ‡, §, ¶, #. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

**References**

**Citation in text**
Please ensure that every reference cited in text is also present in the reference list (and vice versa). Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text in parentheses. 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., Ambeh 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.

**Web references**
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

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

**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 style

Text: Indicate references by (consecutive) superscript Arabic numerals in the order in which they appear in the text. The numerals are to be used outside periods and commas, inside colons and semicolons. For further detail and examples you are referred to the AMA Manual of Style, A Guide for Authors and Editors, Tenth Edition, ISBN 0-978-0-19-517633-9 (see http://www.amanualofstyle.com/)

List: Number the references in the list in the order in which they appear in the text. Please list the first 6 authors in each reference. If there are more than 6 authors, list the first 3 followed by et al.

Examples:


Abbreviations for periodicals cited in the references should follow the style of Index Medicus and can also be accessed at http://www.nlm.nih.gov.

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

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.

Supplementary material is scientific evidence and assumed to be original. If published previously, the source must be cited with permission exactly as required for previously published material and should not include logos, symbolic landmarks, or any other identification of the origin.

Submission checklist
The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:

Cover letter confirming:
- The article is original, with no portion under simultaneous consideration for publication elsewhere or previously published, except for an abstract of fewer than 400 words.
- All authors have read and approve the submission
- One author has been designated as the corresponding author with contact details:
  - E-mail address
  - Full postal address

All necessary files have been uploaded, and:
- Conflicts of all authors are listed on the title page
- Keywords (5-10)
- Each figure caption is included on the same page as the figure it describes
- All tables (including title, description, footnotes)

Further considerations
- Manuscript has been 'spell-checked' and 'grammar-checked'
• Manuscript is double-spaced, single columned, and pages are numbered.
• Manuscript includes continuous line numbering
• References are in the correct format for this journal
• All references mentioned in the Reference list are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Web)

For any further information please visit our customer support site at https://service.elsevier.com.

AFTER ACCEPTANCE

Open access license and payment
Shortly after acceptance, the corresponding author listed on the title page will be contacted regarding license options, funding information, and payment of the Open Access fee.

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.

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