**DESCRIPTION**

**SCOPE OF THE JOURNAL**

Clinical Neurophysiology is dedicated to fostering research and publishing scholarly reports on the pathophysiology underlying diseases of the peripheral and central nervous system of human patients. Clinical trials that use neurophysiological measures to document change or neurophysiological techniques for treatment are encouraged, as are manuscripts reporting data on integrated neuroimaging of peripheral and central nervous function including, but not limited to, functional MRI, brain mapping, MEG, EEG, PET, ultrasound, and other neuroimaging modalities. Studies on normal neurophysiology will be considered, in particular if directly related to disease or clinical applications. Studies on animals and technical reports must have clear relevance and applicability to human disease. Case reports are not generally accepted as full-length submissions but occasionally may be considered as peer-reviewed Letters, if implying substantial advancement of knowledge.

Clinical Neurophysiology covers epilepsy, developmental clinical neurophysiology, psychophysiology and psychopathology, motor control and movement disorders, somatosensory disorders including pain, motor neuron diseases, neuromuscular diseases, neuropathies, sleep and disorders of consciousness, auditory and vestibular disorders, aging, Alzheimer's disease, other dementias, other psychiatric disorders, autonomic disorders, neural plasticity and recovery, intraoperative and ICU monitoring, and therapeutic clinical neurophysiology including non-invasive and invasive brain stimulation.

All studies published in Clinical Neurophysiology must stand on their own and make a substantial contribution to the literature. The journal does not afford a high priority to 'pilot' or 'preliminary' studies or to negative studies that do not advance knowledge.

Reports with a focus on education or clinical practice, case reports, methodological and technical reports and studies reporting normative data on healthy subjects are preferentially being considered in Clinical Neurophysiology Practice, a companion journal of Clinical Neurophysiology.

**AUDIENCE:** Neurologists, Clinical Neurophysiologists, Neuroscientists, Neuroimagers, Psychiatrists, Neuropsychologists, Neurosurgeons

See also the BRAND NEW Companion Journal Clinical Neurophysiology Practice

**TABLE OF CONTENTS**

- **Description** p.1
- **Audience** p.1
- **Impact Factor** p.2
- **Abstracting and Indexing** p.2
- **Editorial Board** p.2
- **Guide for Authors** p.5
IMPACT FACTOR

2017: 3.614 © Clarivate Analytics Journal Citation Reports 2018

ABSTRACTING AND INDEXING

Scopus
BIOSIS
Chemical Abstracts
Current Contents / Clinical Medicine
Current Contents/Life Sciences
Elsevier BIOBASE/Current Awareness in Biological Sciences
EMBASE
MEDLINE®
Neuroscience Citation Index
Pascal M
Research Alert
Research Information Systems/Reference Update
Science Citation Index
SCISEARCH
Web of Science

EDITORIAL BOARD

Editor-in-Chief
Ulf Ziemann, MD, Director of the Department of Neurology, Eberhard-Karls-Universität Tübingen, Hoppe-Seyler Str. 3, 72076, Tübingen, Germany, Fax: +497071295260

Associate Editors
Robert. J. Barry, Wollongong, Australia
James G. Colebatch, Sydney, Australia
Zafiris J. Daskalakis, Toronto, Canada
Christian Krarup, Copenhagen, Denmark
Ron Lesser, Baltimore, USA
David MacDonald, Riyadh, Saudi Arabia
Hartwig R. Siebner, Copenhagen, Denmark
Andrea Truini, Rome, Italy
Yoshikazu Ugawa, Fukushima, Japan

Executive Board
M. Hallett, (President)
P.M. Rossini, (Past-President)
D. Burke, (Editor-in-Chief of Clinical Neurophysiology Practice)
U. Ziemann, (Editor-in-Chief of Clinical Neurophysiology)
Y. Ugawa, (Secretary)
R Dengler, (Treasurer)
L.-Y. Cui, (Member-at-Large)
R. Verdugo, (Member-at-Large)

Honorary Consulting Editors
D. Burke
G.G. Celesia
R.J. Ellingson
M. Hallett
J. Kimura
C.H. Lücking
F. Mauguière
M.R. Nuwer
P.M. Rossini
H. Shibasaki
Past Editors-in-Chief
1949-1961 Herbert H. Jasper (Canada) | Editor-in-Chief
1949-1957 W. Grey Walter (UK) | Co-Editor for Europe
1957-1961 Otto Magnus (The Netherlands) | Co-Editor for Europe
1957-1961 W. Storm van Leeuwen (The Netherlands) | Co-Editor for Europe and the Middle East
1961-1969 Cosimo Ajmone Marsan (USA) | American Editor
1962-1973 William Cobb (UK) | European and Managing Editor
1969-1971 Peter Kellaway (USA) | American Editor
1971-1972 Mary A.B. Brazier (USA) | American Editor
1973-1979 Pierre Buser | European Editor
1973-1984 Mary A.B. Brazier (USA) | Editor-in-Chief
1979-1984 Hans van Duijn (The Netherlands) | European Editor
1984-1987 Hans van Duijn (The Netherlands) | Editor-in-Chief
1984-1984 Mary A.B. Brazier (USA) | American Editor
1987 Timothy Pedley (USA) | Editor-in-Chief of the Western Hemisphere Office
1987-1995 François Mauguière (France) | Editor-in-Chief of the European Office
1988-1999 Gastone G. Celesia, (USA) | Editor-in-Chief of the Western Hemisphere Office
1995-2003 Paolo Rossini (Italy) | Editor-in-Chief of the European Office
2000-2003 Mark Hallett (USA) | Editor-in-Chief of the Western Hemisphere Office
2003-2007 Mark Hallett (USA) | Editor-in-Chief
2008-2015 David Burke (Australia) | Editor-in-Chief

Editorial Board
M. Abe, Sendai, Japan
B. Abou-Khalil, Nashville, USA
G. Alarcon, London, UK
O. Bai, Richmond, USA
M. Ballegaard, Copenhagen, Denmark
M. Bares Brno, Brno, Czech Republic
L. Bateman, New York, USA
U. Baumgartner, Mannheim, Germany
A Bendixen, Chemnitz, Germany
A. Berardelli, Roma, Italy
J. Bragati, Porto Alegre, Brazil
A. C. N. Chen, Beijing, China
C. Chu, Boston, Massachusetts, USA
V. Deletis, New York, USA
S. Dimitriadis, Cardiff, Wales, UK
E. Donchin, Tampa, USA
R. Ferri, Troina, Italy
S. Finnigan, Brisbane, Australia
S. Franceschetti, Milan, Italy
H. Franssen, Utrecht, Netherlands
A. G. Guggisberg, Geneva, Switzerland
C Hawco, Toronto, Ontario, Canada
L. Hobson-Webb, Durham, North Carolina, USA
R Ishii, Suita City, Japan
J. Jacobs, Freiburg, Germany
M. Kinoshita, Kyoto, Japan
M. Knikou, Staten Island, USA
M Kofler, Tirol, Austria
J. Kraus, Prague-Motol, Czech Republic
A. V. Krishnan, Kensington, Australia
D. J. Krusienski, Norfolk, USA
S. Lewis, Sydney, New South Wales, Australia
D. Mathersul, Palo Alto, California, USA
H Matsumoto, Tokyo, Japan
R. Matsumoto, Kyoto, Japan
M Moldovan, Copenhagen, Denmark
T. Murakami, Tokyo, Japan
T. Murakami, Fukushima, Japan
T. Murakami, Tokyo, Japan
N. Nakasato, Sendai, Japan
S. Nandedkar, Hopewell Junction, USA
S Olbrich, Leipzig, Germany
M. Ozgoren, Izmir, Turkey
E. S. Papathanasiou, Nicosia, Cyprus
T. Rajji, Toronto, Ontario, Canada
S. Rampp, Germany
M. Ridding, Adelaide, Australia
T Rosburg, Basel, Switzerland
S. M. Rosengren, Camperdown, Australia
D.L. Schomer, Boston, USA
Y. Shirota, Tokyo, Japan
M. Stecker, Mineola, USA
A. Suppa, Roma, Italy
A. Szelenyi, München, Germany
M. Takemi
O. Vucic, Wentworthville, Australia
GUIDE FOR AUTHORS

Introduction
A manuscript is accepted with the understanding that the material has not been previously published, except in abstract form, and that it is not simultaneously under consideration by any other journal. The Editors reserve the prerogative of requiring the original data from the authors to compare with the supplied illustrations or results. If accepted, the manuscript shall not be published elsewhere in the same form, in either the same or another language, without the consent of the authors and Publisher.

Types of Article
The journal will consider full-length original articles, abstracts, announcement(s), editorials, and letters to the Editor. Review articles are generally by invitation, authored by acknowledged experts in the field, and require a comprehensive and up-to-date survey of a specific area of neurophysiology. Systematic reviews and meta-analyses are not categorised as authoritative Reviews which require Editorial approval before submission. We treat systematic reviews and meta-analyses as original research reports, and they should conform to the normal manuscript format, including a structured Abstract. Other review articles may be considered, but should be pre-approved by the Editor. For review articles, structuring the abstracts is not needed. Original articles are not limited in length, but authors are encouraged to write briefly, avoid repetitions, jargon, neologisms and abbreviations. All studies published in *Clinical Neurophysiology* must stand on their own and make a substantial contribution to the literature. The journal does not afford a high priority to 'pilot' or 'preliminary' studies or to negative studies that do not advance knowledge. Studies in animals are of low priority unless they provide significant new insights into neurophysiological mechanisms of human disease. Methodological/technical reports and studies reporting normative data on healthy subjects are of low priority.

Letters to the Editor are generally comments on papers published in this journal, but may present original research and case reports. There should be no abstract, and the text should be continuous text, with paragraphs but no subsections. Accordingly, subtitles should not be used. Any acknowledgments should be included in the body of the letter. Word count: less than 1000 words. Figures and Tables: 1 figure or 1 table. References: 5.

Opinion papers are invited by the Editor-in-Chief. They provide a brief opinion (3 pages or less, no Abstract, no Keywords, 20 references or less; Figures and Tables: 1 figure or 1 table) on an emergent topic in Clinical Neurophysiology, or on current limitations and/or particular future potential of an already existing field in Clinical Neurophysiology. Opinion papers are prospective papers: they critically examine current status and where the field will move in the next years. Authors must adhere to all relevant Journal guidelines on, e.g., authorship, ethics and disclosure of conflicts of interest.

All manuscripts submitted to *Clinical Neurophysiology*, including Letters and Editorials, are subject to peer review and acceptance is never guaranteed. When appropriate, additional review for statistical adequacy may also be obtained. Decisions of the Editors are final.

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.

Human and animal rights
If the work involves the use of animal or 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; EU Directive 2010/63/EU for animal experiments http://ec.europa.eu/environment/chemicals/lab_animals/legislation_en.htm; 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 studies on human subjects. The privacy rights of human subjects must always be observed.

Informed Consent
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, http://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.

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

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.
Contributors
Each author is required to declare his or her individual contribution to the article: all authors must have materially participated in the research and/or article preparation, so roles for all authors should be described. The statement that all authors have approved the final article should be true and included in the disclosure.

Authorship
The right to authorship should be based on substantial contribution to one or more of the following: conception and the design of the project, its execution, and/or the analysis and interpretation of data. Each author must have participated sufficiently in the work to take public responsibility for the content. All authors should be involved in drafting, writing or revising the research report and should have read and approved the final version of the manuscript. As a guide, being Head of Department, being in a position of authority, personal friendship or having provided access to patients used in the study is generally not sufficient warrant for authorship. Authorship requires intellectual input: the provision of technical assistance or routine assistance in some aspects only of the project may warrant an acknowledgement rather than inclusion as an author. The order in which names appear should be determined by the lead author in consultation with the co-authors, preferably before the research is completed. Assurance that all authors of the paper have fulfilled the criteria for authorship should be given in Author Concurrence Form which must be signed by all authors to confirm that they consent to take public responsibility for the content of the paper and that consent from patients has been obtained.

Multiple Authorship
Manuscripts submitted under multiple authorship are reviewed on the assumption that all listed authors concur with the submission and that a copy of the final manuscript has been approved by all authors and tacitly or explicitly by the responsible authorities in the laboratories where the work was carried out. The submission should include the author concurrence form (see the Journal website) with signatures of all authors. This form may be scanned and uploaded with the submission or be faxed separately to the Editorial Office (FAX: +31 20 485 3881).

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.

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

Copyright
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If
excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

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.

Credits and Permission
Submit with the manuscript permissions to use non-original material (quotations not exceeding 100 words, any graph, table or figure). Permission from both author and Publisher of the original is required. No article can be finally accepted for publication in Clinical Neurophysiology without all required permissions. Credit the source in a text or table footnote, or at the end of a figure legend, as appropriate. Photographs of recognizable persons should be accompanied by a signed release from patient or legal guardian authorizing publication. Masking eyes to hide identity is not sufficient.

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 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-NonCommercial-NoDerivs (CC BY-NC-ND)
For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The gold open access publication fee for this journal is USD 2500, excluding taxes. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.
Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our 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.

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.

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/clinph/.

PREPARATION
Statistical Analysis, Reporting and Interpretation
Appropriate statistical data analyses and presentation of these results are critically important to many of the papers submitted to Clinical Neurophysiology. A well designed statistical approach allows readers to more clearly understand the significance of group differences in neurophysiological measures and, hence, the clinical and scientific implications of that data. Authors are advised to check our Editorial on statistical guidelines and note that papers are peer reviewed by a professional statistician should the need arise.
During submission, authors of Clinical Neurophysiology will therefore be asked to confirm that they have read the Editorial and used its recommendations (provided they have used any statistical data analyses and presentation of their results).

Peer review
This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of 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.

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.

Pagination
Please add page numbers for your submission

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

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. 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.

Acknowledgements for personal and technical assistance should be indicated on the title page. This should include financial support and any conflict of interest. (See Conflict of Interest subsection.)

Manuscript organisation
Manuscripts should be organized as follows: Title page, Abstract, Keywords, Introduction, Methods, Results, Discussion, References, Legends, and Tables and Figures. The title page should include the manuscript's title, the initials and names of the authors, and the place where the work was done. **Please do not use more than 135 characters, including spaces, in the title.** The phrase 'with the technical assistance of...' is not acceptable.
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.

Do not exceed 200 words. N.B. for Reviews an un-structured is required. Abstracts should adhere to the following format: Objective, Methods, Results, Conclusions, Significance. Use of an abstract should eliminate the need for a summary in the main text.

Highlights
Highlights are mandatory for this journal. They consist of three (3) bullet points (one sentence each) that convey the core findings of the article and should be submitted as part of the manuscript-file in the online submission system. See [http://www.elsevier.com/highlights](http://www.elsevier.com/highlights) or recent publications in the journal for examples.

The highlights will help the Editors and Reviewers focus on the important issues in the paper – i.e., what is really important in the study. They will help the Editors identify suitable Reviewers. They will help attract readers to the paper.

Keywords
Immediately after the abstract, provide a maximum of 6 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 abbreviation unless they enhance readability. 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.

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

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

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

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

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

Units
Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

Footnotes
Footnotes should be avoided. If they are necessary, number them consecutively throughout the article, using superscript Arabic numbers. 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.

Table footnotes
Indicate each footnote in a table with a superscript lowercase letter.

Artwork
**Cover Illustration**
Authors are encouraged to submit aesthetically interesting figures (preferably in colour) for possible publication on the front cover of an issue of Clinical Neurophysiology. The photograph should at least be related to the authors' accepted article, but need not be one of the figures appearing in that article. The ideal format of that figure should be 10 x 15 cm for 1:1 reproduction (or any multiples of the above).

**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) regardless of whether or not these illustrations are reproduced in color in the printed version. For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article. Please indicate your preference for color: in print or online only. Further information on the preparation of electronic artwork.

Colour figures relating to functional neuroimaging with MRI, PET and SPECT may be printed without cost at the discretion of the Editor who will make the judgement based on the necessity for the colour and the number of illustrations.

**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 and a copy of the title page of the relevant article must be submitted.

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 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. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/clinical-neurophysiology
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.
Reference formatting

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

Reference style

Text: All citations in the text should refer to:
1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication;
2. Two authors: both authors' names and the year of publication;
3. Three or more authors: first author's name followed by 'et al.' and the year of publication.

Examples: 'as demonstrated (Allan, 2000a, 2000b, 1999; Allan and Jones, 1999).... Or, as demonstrated (Jones, 1999; Allan, 2000) Kram et al. (2010) have recently shown ...'

List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a,' 'b,' 'c,' etc., placed after the year of publication.

Examples:
Reference to a journal publication:

Reference to a journal publication with an article number:

Reference to a book:

Reference to a chapter in an edited book:

Reference to a website:

Reference to a dataset:
[dataset] Oguro M, Imahiro S, Saito S, Nakashizuka T. Mortality data for Japanese oak wilt disease and surrounding forest compositions, Mendeley Data, v1; 2015. https://doi.org/10.17632/xwj98nb39r.1. 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 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 personalise the link to your video data.
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.

**Research data**

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

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

**Data linking**

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

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

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

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

**Mendeley Data**

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

For more information, visit the Mendeley Data for journals page.

**Data statement**

To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.
**S5 Manuscripts**
As a service to the community, this journal makes available online the accepted manuscripts as soon as possible after acceptance. At this stage, the author's accepted manuscript (in both full-text and PDF) is given a Digital Object Identifier (DOI) and is fully citable, and searchable by title, author(s) name and the full-text. The article also carries a disclaimer noting that it is an unedited manuscript which has not yet been copyedited, typeset or proofread. When the fully copyedited version is ready for publication, it simply replaces the author accepted manuscript version.

**AFTER ACCEPTANCE**

**Online proof correction**
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors. If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Society Proceedings**
Abstracts from proceedings of Member Societies of the Federation will be published without charge. Members are urged to send abstracts to the editorial office within 3 months of the meeting. The abstracts will be published in the next available issue of Clinical Neurophysiology. Abstracts will be published on the IFCN web site within one month of receipt of the abstracts by Elsevier.

Abstracts must be in correct English form, no longer than 200 words. It is the responsibility of the responsible contact person of Member Societies to ensure that these instructions are complied with. A separate page should give the title of the member Society, the place and date of the meeting and the name and address of the responsible contact person who will receive proofs. Each abstract should be preceded by number, title, author(s) name(s), name of the institution where the work was done (not more than 5 words), city and country.

No editing of the abstracts will be done by the Editors or the publisher.

**Offprints**
The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's Webshop. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**AUTHOR INQUIRIES**
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch.

You can also check the status of your submitted article or find out when your accepted article will be published.

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