The mission of Nanomedicine: Nanotechnology, Biology, and Medicine (Nanomedicine: NBM) is to promote the emerging interdisciplinary field of nanomedicine.

Nanomedicine: NBM is an international, peer-reviewed journal presenting novel, significant, and interdisciplinary theoretical and experimental results related to nanoscience and nanotechnology in the life sciences. Content includes basic, translational, and clinical research addressing diagnosis, treatment, monitoring, prediction, and prevention of diseases.

The potential scope of nanomedicine is broad, and we expect it to eventually involve all aspects of medicine. Sub-categories include synthesis, bioavailability, and biodistribution of nanomedicines; delivery, pharmacodynamics, and pharmacokinetics of nanomedicines; imaging; diagnostics; improved therapeutics; innovative biomaterials; interactions of nanomaterials with cells, tissues, and living organisms; regenerative medicine; public health; toxicology; point of care monitoring; nutrition; nanomedical devices; prosthetics; biomimetics; and bioinformatics.

Article formats include Communications, Original Articles, Reviews, Perspectives, Technical and Commercialization Notes, and Letters to the Editor. We invite authors to submit original manuscripts in these categories.

IMPACT FACTOR

2017: 6.500 © Clarivate Analytics Journal Citation Reports 2018

ABSTRACTING AND INDEXING

MEDLINE®
BIOSIS Previews
EMBASE
Scopus
Biological Abstracts
Biotechnology Citation Index
SciSearch
Journal Citation Reports - Science Edition
EDITORIAL BOARD

Editor-in-Chief
Tatiana K. Bronich, University of Nebraska Medical Center (UNMC), Omaha, Nebraska, USA

Clinical Editor
Rudi Rubenstein, University of Illinois at Chicago, Chicago, Illinois, USA

Associate Editors
Raj Bawa, Rensselaer Polytechnic Institute, New York, New York, USA
Stefan H. Bossmann, Kansas State University, Manhattan, Kansas, USA
Zhen Cheng, Stanford University, Stanford, California, USA
Mark B. Evers, University of Kentucky, Lexington, Kentucky, USA
Arash Hatefi, Rutgers University, Piscataway, New Jersey, USA
Seungpyo Hong, University of Illinois at Chicago, Chicago, Illinois, USA
Raghuraman Kannan, University of Missouri, Columbia, Missouri, USA
Benjamin G. Keselowsky, University of Florida, Gainesville, Florida, USA
Ratneshwar Lal, University of California at San Diego (UCSD), La Jolla, California, USA
Ronit Satchi-Fainaro, Tel Aviv University, Tel Aviv, Israel
Anna Schwendeman, University of Michigan, Ann Arbor, Michigan, USA
Zhifeng Shao, Shanghai Jiao Tong University, Shanghai, China
Albert J. Sinusas, Yale University School of Medicine, New Haven, Connecticut, USA
Anil K. Sood, University of Texas M.D. Anderson Cancer Center, Houston, Texas, USA
Maria Jesus Vicent, CIPF, Valencia, Spain
Andrew Wang, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA
Thomas Webster, Northeastern University (NU), Boston, Massachusetts, USA
Min Wu, University of North Dakota, Grand Forks, North Dakota, USA
Yi Yan Yang, Institute of Bioengineering and Nanotechnology, Singapore, Singapore

Honorary Editorial Board
James Baker, Jr., University of Michigan, Ann Arbor, Michigan, USA
Hamid Ghandehari, The University of Utah, Salt Lake City, Utah, USA
Peixuan Guo, The Ohio State University, Columbus, Ohio, USA
Donald Tomalia, NanoSynthons LLC, Mount Pleasant, Michigan, USA

Editorial Board
Thomas L. Andresen, PhD, Technical University of Denmark, Lyngby, Denmark
Cheryl A. Baker, MD Anderson Cancer Center Orlando, Orlando, Florida, USA
Elena Batrakova, University of North Carolina at Chapel Hill, Wilmington, North Carolina, USA
Vladimir Chekhonin, Russian State Medical University, Moscow, Russian Federation
Shuk Han Cheng, City University of Hong Kong, Hong Kong, China
Saikat Das, Christian Medical College, Vellore, Tamil-Nadu, India
Anjan K. Dasgupta, University of Calcutta, Kolkata, India
Kenneth Dawson, University College Dublin, Dublin, Ireland
Joseph M. DeSimone, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA
Si-Shen Feng, National University of Singapore, Singapore, Singapore
Tayyaba Hasan, Massachusetts General Hospital, Boston, Massachusetts, USA
Jack Hoopes, Dartmouth College, Hanover, New Hampshire, USA
Maria Kavallaris, UNSW Australia, Randwick, Australia
Kyu Back Lee, Korea University, Seoul, The Republic of Korea
Yasushiito Matsumura, National Cancer Center Hospital East, Kashiwa, Japan
Nathalie Mignet, Université Paris Descartes, Paris, France
Rajiv R. Mohan, University of Missouri, Columbia, Missouri, USA
Shaker A. Mousa, Albany College of Pharmacy and Health Sciences (ACPHS), Rensselaer, New York, USA
Ravindra Pandey, Roswell Park Cancer Institute, Buffalo, New York, USA
Raju Ramanujan, Nanyang Technological University, Singapore, Singapore
David Sosnovik, Harvard University, Boston, Massachusetts, USA
Wutian Wu, The University of Hong Kong, Hong Kong, China
Chunfu Zhang, Shanghai Jiao Tong University, Shanghai, China
GUIDE FOR AUTHORS

Article types

Selection of the appropriate article type is very important because requirements do differ.

COMMUNICATIONS: Communications are to disseminate new observations quickly to the scientific community. Length of communications should not exceed 1,500 words (including body text, and figure legends), and the article should have no more than 5 figures. No more than 25 references should be cited. Include an Abstract of 150 words or less without internal subheadings and citations. Upon acceptance, Communications enjoy priority in publishing and are entered into the next available issue.

ORIGINAL ARTICLES: Full-length articles describe a full account about hypothesis-based research or theory in nanomedicine. Length should not exceed 5,000 words (including body text and figure legends), and the article should have no more than 8 figures in the main article. No more than 60 references should be cited. Include an Abstract of 150 words or less without internal subheadings and citations. The body text should include the four separate headings: Background, Methods, Results, and Discussion. Use of supplementary materials is recommended for detailed descriptions (see below).

REVIEWS: Critical reviews of selected important topics in nanomedicine research are solicited from opinion leaders. Length of Reviews should not exceed 12,000 words (including body text, and figure legends), and the article should have no more than 15 figures. No more than 200 references should be cited in the review; additional references should be moved to the supplementary file(s). Include an Abstract of 150 words or less without internal subheadings and citations. Authors wishing to submit an unsolicited Review manuscript should send the title of the planned subject and a tentative Table of contents for the specific topics to be covered along with names of authors and a brief, 250-word synopsis to nnbm.journaloffice@gmail.com for pre-submission approval by the Editors.

PERSPECTIVES IN NANOMEDICINE: Invited articles or brief editorial comments that represent opinions of recognized leaders in nanomedicine research and are written for the general scientific readership. Length should not exceed 3,500 words (including body text and figure legends). Authors wishing to submit an unsolicited Perspective manuscript should send the title and the planned content along with names of authors and a brief, 250-word synopsis to nnbm.journaloffice@gmail.com for pre-submission approval by the Editors.

LETTERS TO THE EDITOR: Letters to the Editor serves the purpose to comment on research published in Nanomedicine: NBM, including criticism or important comments. Letters may not exceed 500 words with maximum 10 references, one illustration, and one table. Letters and Responses to Letters are published together.

TECHNICAL AND COMMERCIALIZATION NOTES: Information regarding new technologies, crucial business and regulatory issues, commercialization of new products in the field, including intellectual property and patenting, nanotechnology law, etc. Length of technical notes should not exceed 2,000 words (including body text and figure legends), 5 figures, and 10 references. Include an Abstract of 150 words or less without internal subheadings and citations.

CASE STUDIES: These articles are descriptive or explanatory reports on actual clinical events based on an in-depth investigation of a single patient or a small group of individuals, related to use of nanomaterials, nanostructures, or nanomedicines in real-life context. Length of case studies should not exceed 3,500 words (including body text, and figure legends) with a maximum of 6 figures and 25 references. Include an Abstract of 150 words or less without internal subheadings and citations. Accepted case studies enjoy priority in publishing.

For all article types, authors should provide in the manuscript only information essential for the discussion of results and utilize the Supporting Materials file to provide all experimental details and other non-essential supporting information. There are no limitations for length, figures, and references in Supplementary Materials. Communications and Original Articles complete with Supporting Materials must contain sufficient information to reproduce the experiments and data by someone experienced in the art.

Meeting Announcements, Meeting Proceedings, and Meeting Summaries may be published on the Journal website under a different heading and without typesetting.
The Journal may provide templates for material that will not receive typesetting. For questions, please contact Vindra Dass at v.dass@elsevier.com.

BEFORE YOU BEGIN

Ethics in publishing
Nanomedicine: NBM considers research and publication misconduct to be a serious breach of ethics, and will take such actions as necessary to address such misconduct. Plagiarism is defined as un referenced use of published or unauthorized use of unpublished ideas, and may occur at any stage of planning, researching, writing, or publication. Plagiarism takes many forms, from "passing off" another's paper as the author's own paper, to copying or paraphrasing substantial parts of another paper (without attribution), to claiming results from research conducted by others. Plagiarism in all its forms constitutes unethical publishing behavior and is unacceptable. Duplicate submission/publication occurs when two or more papers, without full cross-reference, share the same hypothesis, data, discussion points, or conclusions. All manuscripts submitted to Nanomedicine: NBM are checked by CROSSCHECK, a professional software (http://www.ithenticate.com) before editorial consideration. For information on Ethics in publishing and Ethical guidelines for journal publication see http://www.elsevier.com/publishingethics and http://www.elsevier.com/journal-authors/ethics. Authors may also refer to the Committee on Publication Ethics (COPE) and the International Committee of Medical Journal Editors for full information.

Permissions
If any material has been published previously (figure, tables, etc), please provide written permission from the copyright holder to use such material. Authors are responsible for obtaining permission and payment of any fees associated with reuse. For more information, see the Permissions FAQ for Authors. For assistance, please contact Elsevier's Permissions Helpdesk: +1-800-523-4069 x3808; +1-215-239-3805; permissionshelpdesk@elsevier.com.

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 experimentation with human subjects. The privacy rights of human subjects must always be observed. 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. For studies involving human or animal research, indicate approval by the institution's human or animal subject review committee in the Methods section of the manuscript. Include an additional statement of the humane care of the animals with animal studies and a statement of informed consent or exempt classification by the IRB with human studies.

Conflict of interest
Authors are required to acknowledge all funding sources that supported their work as well as all institutional or corporate affiliations of the authors. Each submission must also include a publishable statement on the title page disclosing any commercial associations, current and within the past five years that might pose a potential, perceived, or real conflict of interest. These include grants, patent licensing arrangements, consultancies, stock or other equity ownership, advisory board memberships, or payments for conducting or publicizing the study. When no competing interests are present, include a statement on the title page. Further information and an example of a Conflict of Interest form can be found at: http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing. See also http://www.elsevier.com/conflictsofinterest. When no competing interests are present, include a statement on the title page.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where
the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

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

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

**Authorship**
The corresponding author must certify that all listed authors meet the Authorship and Contributorship criteria of the International Committee of Medical Journal Editors detailed at http://www.icmje.org/ethical_1author.html, according to which each participant:
1) made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
2) drafted the article or revised it critically for important intellectual content; and
3) gives approval of the submitted manuscript and subsequent versions.

All authors of a submitted manuscript must sign a form declaring that they meet all of the above criteria for authorship, approve the most recent submitted version of the manuscript, and take full responsibility for the manuscript. This form will be provided to the corresponding author when the Editors reach a decision that the manuscript may be potentially publishable. Those who do not meet all the criteria for authorship may be listed in the Acknowledgments. Examples of contributors listed in acknowledgements include a person who provided purely technical help, writing assistance, assistance with study design, data collection, or a department chairperson who provided only general support.

**Changes to authorship**
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

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

**Copyright**
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.
Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

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

**Author rights**
As an author you (or your employer or institution) have certain rights to reuse your work. More information.

**Elsevier supports responsible sharing**
Find out how you can share your research published in Elsevier journals.

**Role of the funding source**
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

**Funding body agreements and policies**
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the gold open access publication fee. Details of existing agreements are available online.

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 3750**, excluding taxes. Learn more about Elsevier's pricing policy: [https://www.elsevier.com/openaccesspricing](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.

**Elsevier Researcher Academy**

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

**Language (usage and editing services)**

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

**Referees**

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

**General requirements**

1) The manuscript must be of INTERDISCIPLINARY nature, representing the overlapping fields nanoscience and nanotechnology with biology, and medicine.
2) NOVELTY and ORIGINALITY are of primary importance. The results presented must significantly advance the field and improve scientific knowledge. Manuscripts with similar approaches that have already been undertaken by other groups should be submitted to appropriate journals. Originality of submissions is routinely checked by the editors using professional software.
3) SIGNIFICANCE: Accounts of research must appeal to a broad readership. In the cover letter, authors should provide a paragraph explaining how the work differs from the knowledge available in the literature and describe how it improves or has the potential to improve medicine.
4) REPRODUCIBILITY: Methods and materials should be reproducible and - in general - results and conclusions must move the field forward. Experimental studies must include at least in vitro results (one of them in an appropriately selected healthy cell line), although in vivo is preferred. Accordingly, synthesis and characterization of nanotechnology-based medicines (i.e., substances that promote healing) must accompany bioavailability and toxicity data and their comprehensive evaluation. Manuscripts that do not satisfy these general requirements will not be sent out for peer review and will be returned to the authors.

**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.

NEW: At first submission, manuscripts may be submitted as single Word or PDF files, including references, figure legends, figures, and tables. All manuscript components need to be included to allow for evaluation of your manuscript. Graphical Abstract files are required at initial submission. If the editors determine that the work is potentially publishable, source files of the manuscript, figures, and tables will be required as well as other submission elements such as permissions and the authorship agreement form (see below). Include a cover letter and title page with counts as specified below.

**Article structure**
Submission items include a cover letter, a list of suggested reviewers, text for the graphical abstract, image for the graphical abstract, the manuscript (including title page, abstract, manuscript text [divided into Background, Methods, Results, and Discussion for Original Articles], references, and figure legends), tables, and figures. Authors are advised to upload supporting information in Supplementary Material and permissions (see below) if needed. Revised manuscripts should also be accompanied by a unique file (separate from the cover letter) with responses to reviewers’ comments. The preferred order of files is as follows: cover letter, suggested reviewers, response to reviews (revised manuscripts only), graphical abstract files, manuscript file, table(s), figure(s), supplementary material, permission(s), if needed. Files should be labeled with appropriate and descriptive file names (e.g., SmithManuscript.doc, Figure1.eps, Table3.doc, Supplementary.pdf). If a revision is requested, upload text, tables, and figures as separate files. Do not embed figures or tables into the text document. Please upload your revised text as a Word file, and upload text-based Supplementary Materials as a PDF. All manuscripts must conform to Uniform Requirements for Manuscripts Submitted to Biomedical Journals. Cover letter Be sure to state that the manuscript, or any part of it, has not been published and will not be submitted elsewhere for publication while being considered by the journal *Nanomedicine: NBM* in the cover letter. If there is any overlap between the submission and any other material, published or submitted, detail the nature of and reason for the overlap; as relevant, upload a copy of the other material.

**Title page**
Essential title page information

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. A title should describe the article's content clearly and precisely and allow the reader to decide whether it would be appropriate to consult the article further. The title is the advertisement for the article; a poorly titled article may never reach its target audience, so be specific. Omit unnecessary words such as “Novel,” “New,” “A study of,” “Investigations of,” “Observations on,” etc. Do not use abbreviations and jargon. Avoid overinflated, bombastic “marketing” titles. Indexing and abstracting services depend on the accuracy of the title and keywords used in cross-referencing are extracted from the title itself.

- **Author names and affiliations.** 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 phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be 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.
The title page must include the word count for abstract; complete manuscript word count (including body text and figure legends, but excluding abstract, title page, and references), and number of figures/tables. There is no length limit on Supplementary Material. **Manuscripts with over-the-limit word counts will be returned to the authors without further review.** The title page must include statements of funding or conflicts of interest. Please make note of any prior presentation of abstracts at meetings regarding the research.

**Abstract**
A concise and factual summary of 150 words or less without internal subheadings and citations is required. The abstract should state briefly the purpose of the research, the principal results, and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, references and abbreviations should be avoided, but, if essential, they must be defined at their first mention in the abstract itself. Insert 3 to 5 key words after the abstract. Be sure to include the abstract in the manuscript file.

**Graphical abstracts**
Authors are required to submit a graphical abstract for their article containing one image and a short description; both should briefly summarize the essence of the paper in a concise form designed to capture the attention of a wide readership and for compilation of databases. Graphical abstracts should be submitted as a separate file in the online submission system. The image should present the key points of the paper in a concise, pictorial form designed to seize the attention of readers and should not contain more than four panels. Please submit one image (in .tif or .eps format); see below for further resolution requirements. The text component should be ~50-100 words in .doc format, and it should not be the same as the abstract in the manuscript. If a figure in the manuscript is used as the graphical abstract image, please note this at the end of the abstract (i.e.: Graphical Abstract: Figure 2), and refer to the system's instructions for uploading. Examples of successful graphical abstract images and a link to Graphical Abstract Polishing can be found at [http://www.elsevier.com/graphicalabstracts](http://www.elsevier.com/graphicalabstracts); see also a recent issue of the Journal, particularly [Example 1](#), [Example 2](#), [Example 3](#).

Authors can make use of Elsevier's [Illustration Services](#) to ensure the best presentation of their images also in accordance with all technical requirements.

**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**
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.

**Structure of text**
For Communications and Original Articles, the text should include the headings Background, Methods, Results, and Discussion. Only essential data and descriptions should be provided in the Methods and Results. All experimental details including synthetic and analytical procedures must be provided as SUPPLEMENTARY MATERIALS (see details below). All pages must be numbered. Abbreviations must be parenthetically notated at first mention in the text. Each table and figure must be mentioned in the text. Reports of studies on humans and animals must indicate that each study has been approved by an institutional review committee and the procedures followed are in accordance with institutional guidelines. Provide generic rather than trademarked names of drugs.

**Acknowledgements**
The acknowledgments section recognizes substantive contributions of individuals who do not meet the criteria for authorship (see below). The Editorial Office must receive written, signed consent from each person recognized in the acknowledgments to be mentioned in the article because acknowledgment can imply endorsement of data and conclusions. (See a sample of an Acknowledgement.) Upload each permission separately in the online system. Do not include statements of funding, conflicts, or other disclosures in the Acknowledgments; these must appear on the title page.

**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
Do not use footnotes in the text.

Artwork
Electronic artwork
Figures must be of professional quality and suitable for evaluation purposes. Be sure all font is at a readable size. When possible, please use first-generation artwork. If a revision is requested, source files must be provided: Figures must be submitted in electronic figure file format: .tif, .eps, or .jpg format. Figures may be black and white line art, graphs, halftones (photographs), or color. Line art (black lines on a white background) must have a minimum resolution of 1,000 ppi. Combination line art (e.g., line art with gray fill patterns) must be created at 500 ppi. Black and white or color photographs must have a minimum resolution of 300 ppi. Illustrations should be saved at the recommended resolution setting and sized as close to a column width (3 to 4 inches) as possible. Create figures in scale with each other to the extent possible. Avoid background gridlines and other formatting that do not convey information (e.g., superfluous use of 3-dimensional formatting, background shadings). Use uniform lettering and sizing of all original artwork. As a general rule the lettering on the artwork should have a finished, printed size of 7 points. Smaller lettering will yield barely legible text. Recommended font choices include Arial, Helvetica, or Symbol. Labeling of multipart figures (e.g., A, B, C...) should use capital letters only and should be done consistently, preferably using uppercase type (Arial, Helvetica or Universe, 11 or 12 points) in the lower-right corner of the figure. Avoid headings on the figure when possible. Additional information on preparation of electronic artwork can be found in the Artwork Instructions available at http://www.elsevier.com/authors. For best results, please follow these guidelines carefully. There is no charge for publication of color illustrations. 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 printed version.
- Submit each illustration as a separate file.
A detailed guide on electronic artwork is available on our website: http://www.elsevier.com/artworkinstructions

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.

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
Number tables consecutively in accordance with their appearance in the text. Table numbers should be Arabic, followed by a period and a brief title. Upload each table as a separate file. Use the same type size as in the text where possible. Supply a brief heading for each column. Do not use vertical lines between columns. Use horizontal lines above and below the column headings and at the bottom of the table only. Use extra space to delineate sections within the table. Abbreviations used in the table must be defined in a footnote to the table. Indicate footnotes in this order: *, †, ‡, §, ||, #, **, ††, ‡‡, §§, ||||, ¶¶, etc. 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
Cite references in numeric order according to the first mention in the text. Accuracy of reference data is the responsibility of the author. Verify all references against original sources. “In press” citations must have been accepted for publication and the name of the journal or book publisher must be included; these citations must be updated before publication. Unpublished results and personal communications should not appear in the reference list but may be mentioned in the text. Authors wishing to cite unpublished material must have a letter of permission from the originator of the communication to do so. This letter should be submitted with the manuscript. Please ensure that every reference cited in the text is also present in the reference list (and vice versa).

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
References can be in any style or format as long as the style is consistent. Author(s) name(s), journal title/book title, article title, year of publication, volume and issue or book chapter and the pagination must be present. The reference style required by the journal will be applied to the published version by Elsevier.

For those who wish to format the references, if using EndNote software, the journal reference style is Embellished Vancouver (Style 3a). Reference format should conform to the examples shown below, and journal abbreviations should conform to the style used in the Cumulated Index Medicus.

The style of citation should be as follows:

Journals: authors' last names and initials; title of article; journal name; date; volume number, and inclusive pages (list all authors when six or fewer; when seven or more, list six and add et al):

Books: authors' last names and initials; chapter title, editor's name, book title, edition, city, publisher, date, and pages:

Journal abbreviations source
Journal names should be abbreviated according to the List of Title Word Abbreviations.

Supplementary materials
Nanomedicine: NBM accepts supplementary data files to accompany the online article, allowing authors to support and enhance their papers. Supplementary materials may include experimental details, additional images, background datasets, video clips, etc. Experiments should be described in such detail that someone trained in the art could repeat the experiment or measurement. Please provide text-based data as a separate PDF file when submitting your manuscript. All supplementary materials are subject to peer review but will not be edited by Nanomedicine: NBM and will be posted as provided by the authors. There are no limitations for length, figures, and references in Supporting Materials.

Video
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Data visualization
Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.
**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. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. 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.

**Submission checklist**

The order of the documents should be as follows:

- Cover letter stating that the manuscript or any part of it has not and will not be submitted or published elsewhere (initial submission)
- Suggestions for potential reviewers (initial submission)
- Point-by-point response to reviewers and editors (revised submissions)
- Graphical Abstract (text in .doc format; image in .eps, .tif, or .jpg format depending on article type)
- Manuscript (in .doc format for revised submissions):
Editorial decisions and peer review

Editorial decisions

REJECT WITH INTERNAL REVIEW: Manuscripts may be rejected based on an internal editorial review if the manuscript does not fit the scope of the journal or did not achieve a sufficient score considering originality, reproducibility, and/or initial quality to be sent to external reviewers.

REVISE: Authors are expected to address the concerns of the Editor and the reviewers in a constructive way. A request to submit a revised manuscript does not guarantee its acceptance only that it will be reconsidered by the same editor. Revised manuscripts should be submitted by or before the deadline specified in the letter; authors may request an extension to the deadline if needed.

REJECT WITH HOPE: The manuscript is promising, but it requires significant modifications and/or additional experimental work. Authors can decide whether to submit a new version of the topic to the journal; the new version cannot be resubmitted earlier than 60 days from the date of the decision, but otherwise there is no deadline for submission. These new manuscripts should be accompanied by a unique file (separate from the cover letter and the body of the text) addressing previous reviewers' comments. NOTE: Nanomedicine: NBM does not have minor and major revision categories, only REVISE. In the case of "REJECT WITH HOPE" decision the copyright goes back to the authors and they can elect to whether consider the comments and submit a new manuscript of the same topic to Nanomedicine NBM, or go to another journal. RwH manuscripts of the same topic that are sent to us again, are new manuscripts and all requirements for a new submission apply including processing fee. These manuscripts may or may not go back to the same editor and/or to the same reviewers, although the editors are provided with the responses in your renewed manuscript.

REJECT: Manuscripts may be rejected if it does not fulfill all the requirements of the journal. Manuscripts with REJECT decisions (except for REJECT WITH HOPE) will not be reconsidered and should not be resubmitted to the Journal. Generally, these manuscripts are recommended for submission elsewhere.

ACCEPT: The manuscript is accepted for publication and is sent to production.

Peer review

The purpose of the peer-review is to advise the editors regarding the value, originality, and significance of the manuscript.

All manuscripts will be first evaluated for adherence to submission guidelines, assessed by the editors for originality and initial quality, and may then undergo a peer-review process at the discretion of the editors. Reviewers evaluate strengths and weaknesses of the work, but provide only advice. Identified weaknesses must be addressed i.e., accepted and corrected, or may be argued by the
authors. Evaluation of any manuscript is based on its actual content, and responding to peer-review may not immediately be sufficient to earn publication. Provisional or final acceptance is based on scope, originality, scientific merit, relevance, reproducibility, clarity, and topical balance of the Journal. Editors may make a justified decision at any point of the review process. However, when peer review is solicited, at least two critiques are required. Final decisions are made by two editors and are communicated to the corresponding author by e-mail.

AFTER ACCEPTANCE

Online proof correction
Authors should carefully check all proofs, as it is their responsibility to see that all errors are corrected and queries answered. The authors have final responsibility for the accuracy of the publication. Corresponding authors will receive an e-mail with a link to our ProofCentral 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 upload all of your corrections within 48 hours. 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. Note that Elsevier may proceed with the publication of your article if no response is received.

Offprints
The corresponding author, at no cost, will be provided with a PDF file of the article via e-mail (the PDF file is a watermarked version of the published article and includes a cover sheet with the journal cover image and a disclaimer outlining the terms and conditions of use). 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. Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover.

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.

Last updated September 2014

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