DESCRIPTION

She Ji is a peer-reviewed, trans-disciplinary design journal with a focus on economics and innovation, design process and design thinking. She Ji is fully open access. Our mission is to enable design innovation in industry, business, non-profit services, and government through economic and social value creation. Innovation requires integrating ideas, economics, and technology to create new knowledge at the intersection of different fields. She Ji provides a unique forum for such inquiry.

She Ji addresses how societies, organizations, and individuals create, build, distribute, use, and enjoy goods and services, with added focus on strategy and management. It provides key articles in research methods and methodology, philosophy, and philosophy of science to support the core journal area. The journal also explores the way that organizations increasingly use design thinking to achieve success, and the journal examines how design thinking can inform wider social, managerial, and intellectual discourses.

She Ji invites papers on a wide range of topics, including the following:

- Design driven innovation within social and economic change
- Design practices in management, consulting, and public service
- Design for alternative economies and industrial transformation
- Design for smart and sustainable living
- Latest design theories, methods, and methodologies
- Design for social innovation, organizational change, and education
- Design, computation, and algorithms
- Cultural aspects of design and innovation
- Philosophy of design
- Philosophy of science for design research

In particular, She Ji encourages three new dimensions in the literature of design and innovation: (1) serious economic inquiry and management inquiry; (2) rigorous research in design using the methods of the natural sciences, social sciences, and economics; (3) methodological contributions that deploy innovative research methods and processes.

She Ji publishes seven types of articles:

- Original research articles. She Ji welcomes conceptual, theoretical, and empirical articles. All research articles are subject to double-blind, refereed peer review. Following peer review, She Ji works with authors on a final round of copy editing to ensure highly readable articles that will reach...
and influence a wide audience of scholars, researchers, and professional designers, teachers and students, as well as leaders in business, industry, and government.

- Review articles. *She Ji* encourages literature review and research review. Review articles use double-blind, refereed peer review followed by copy editing.
- Case studies. *She Ji* publishes two kinds of case study articles. The journal welcomes original research articles involving rigorous case studies and reflection. Research case studies use double-blind, refereed peer review followed by copy editing. The journal also welcomes shorter reports in the short communications category.
- Short communications. *She Ji* welcomes short reports or and research announcements that describe work in progress and preliminary research results. Short communications are not subject to peer review.
- Book reviews. Books reviews focus on analysis and discussion of individual books as well as extended book reviews covering several books. *She Ji* also publishes short book notes. contents. Book reviews are not subject to peer review.
- Discussion articles. Discussion articles include interviews, opinion leader commentary, and dialogues. Discussion articles are not subject to peer review.
- Letters. *She Ji* encourages written responses to articles and original comments on issues relevant to the journal. Letters to the editor are limited to 1,500 words. All letters commenting on articles will be sent to the author of the original article for response. Selected letters will be published in *She Ji*. Letters are not subject to peer review.

**ABSTRACTING AND INDEXING**

- Directory of Open Access Journals (DOAJ)
- Scopus

**EDITORIAL BOARD**

*Editor-in-Chief*
Ken Friedman, College of Design and Innovation, Tongji University, China

*Executive Editor*
Yongqi Lou, College of Design and Innovation, Tongji University, China

*Managing Editor*
Jin Ma, College of Design and Innovation, Tongji University, China

*Deputy Managing Editor*
Deirdre Barron, Faculty of Design, Swinburne University of Technology, Australia

*Associate Editor*
Eli Blevis, Indiana University, USA
Carolynne Bourne AM, Bourne and Associates P/L, Australia
Sam Bucolo, University of Technology, Australia
Ilpo Koskinen, The Hong Kong Polytechnic University, China
Ksenija Kuzmina, Loughborough University, UK
Michael Lissack, Institute for the Study of Coherence and Emergence, USA
Punya Mishra, Mary Lou Fulton Teachers College, Arizona State University, USA
Gjoko Muratovski, University of Cincinnati, USA
Jack Ox, University of Texas at Dallas, USA
Owain Pedgley, Middle East Technical University (METU)
Tiiu Poldma, Université de Montréal, Canada
Lubomir Popov, Bowling Green State University, USA
Danielle Wilde, University of Southern Denmark, Denmark

*Editorial Board*
Antti Ainamo, Högskolan i Borås, Sweden
Linden Ball, University of Central Lancashire, UK
Christian Bason, Danish Design Centre, Denmark
Tracy Bhamra, Loughborough University, UK
Cees de Bont, The Hong Kong Polytechnic University, Hong Kong
Bruce Calway, Shandong University, China
Lin-Lin Chen, Department of Industrial and Commercial Design, National Taiwan University of Science and Technology, Taiwan; Faculty of Industrial Design, Eindhoven University of Technology, The Netherlands
Bo T. Christensen, Copenhagen Business School (CBS), Denmark
Rachel Cooper, Lancaster University, UK
Meredith Davis, North Carolina State University, USA
Brigitte Borja de Mozota, Université Paris-Sorbonne (Paris IV), France
Lily Diaz-Kommonen, Aalto University, Finland
Jerry Diethelm, University of Oregon, USA
Kees Dorst, University of Technology Sydney, Australia
Linda Drew, Ravensbourne College of Design and Communication, UK
Kalevi Ekman, Aalto University, Finland
Alastair Fuad-Luke, Free University of Bozen-Bolzano, Italy
Carma R. Gorman, University of Texas at Austin, USA
Roy Green, University of Technology Sydney, Australia
Pierre Guillet de Monthoux, Copenhagen Business School (CBS), Denmark
Paul Hekkert, Delft University of Technology, Netherlands
Dan Hill, Future Cities Catapult, UK
Sabine Junginger, Macromedia University of Applied Sciences, Germany
Lorraine Justice, Rochester Institute of Technology, USA
Barry Katz, Stanford University, USA
Lucy Kimbell, University of Oxford, UK
Kun-Pyo Lee, Korea Advanced Institute of Science and Technology (KAIST), The Republic of Korea
Chris McMahon, University of Bristol, UK
Anna Meroni, Politecnico di Milano, Italy
Derek Miller, The Policy Lab, USA
Peter Murphy, La Trobe University, Australia
Yukari Nagai, Japan Advanced Institute of Science and Technology, Japan
Bonnie Nardi, University of California at Irvine, USA
Christena Nippert-Eng, Indiana University, USA
Donald Norman, University of California at San Diego (UCSD), USA
David Raizman, Drexel University, USA
† M P Ranjan (in memoriam), Ahmedabad University, India
Göran Roos, Economic Development Board of South Australia, Australia
† Seymour Roworth-Stokes (in memoriam), University for the Creative Arts
Christopher Smith, University of the Arts, UK
Susan Squires, University of North Texas, USA
Marco Steinberg, Snowcone and Haystack, Finland
Erik Stolterman, Indiana University, USA
Toshiharu Taura, Kobe University, Japan
Scott Thompson-Whiteside, Swinburne University of Technology, Australia
Teal Triggs, Royal College of Arts, UK
Elizabeth (Dori) Tunstall, OCAD University, Canada
Anna Valtonen, Aalto University, Finland
Karel van der Waarde, Basel School of Design, Switzerland
Peter-Paul Verbeek, University of Twente, Netherlands
Roberto Verganti, Politecnico di Milano, Italy
Min Wang, Central Academy of Fine Arts, China
Xiangyang Xin, Jiangnan University, China
Mike Zender, University of Cincinnati, USA

Editorial Advisory Board
Richard Buchanan, Weatherhead School of Management, Case Western Reserve University, USA
Nigel Cross, School of Engineering and Innovation, The Open University, UK
Larry Leifer, Ctr. for Design Research, Stanford University, USA
Swee Mak, Design Research Institute, RMIT University, Australia
Ezio Manzini, Design Faculty, Politecnico di Milano, Italy
Sharon H. Poggenpohl, Visible Language, USA
Yrjö Sotamaa, School of Arts, Design, and Architecture, Aalto University, Finland
Maureen Thurston, Aurecon, Australia
Jane Treadwell, World Bank, USA
Patrick Whitney, Institute of Design, Illinois Institute of Technology, USA
Siegfried Zhiquiang Wu, College of Architecture and Urban Planning, Tongji University, China
INTRODUCTION

Types of paper

*She Ji* publishes seven types of articles: *Original research articles*. *She Ji* welcomes conceptual, theoretical, and empirical articles. All research articles are subject to double-blind peer review. **Review articles.** *She Ji* encourages literature review and research review articles. Review articles use double-blind peer review. **Case studies.** *She Ji* publishes two kinds of case study articles. The journal welcomes original research articles involving rigorous case studies and reflection. Research case studies use double-blind peer review. **Short communications.** *She Ji* welcomes short reports or research announcements that describe work in progress with preliminary research results. Short communications are not subject to peer review. **Book reviews.** *She Ji* focuses on analysis and discussion of individual books as well as extended book reviews covering several books. *She Ji* also publishes short book notes. Book reviews are not subject to peer review. **Discussion articles.** Discussion articles include interviews, opinion leader commentary, and dialogues. Discussion articles are not subject to peer review. **Letters.** *She Ji* encourages written responses to articles and original comments on issues relevant to the journal. Letters to the editor are limited to 1,500 words. All letters commenting on articles will be sent to the author of the original article for response. Selected letters will be published in *She Ji*. Letters are not subject to peer review.

Please ensure that you select the appropriate article type from the list of options when making your submission. Authors contributing to special issues should ensure that they select the special issue article type from this list.

BEFORE YOU BEGIN

**Ethics in publishing**

Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

**Declaration of interest**

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential 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.

**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').
**Changes to authorship**

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

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

**Copyright**

When an article has been accepted for publication the authors will be asked to complete a ‘Journal Publishing Agreement’. Acceptance of the agreement will ensure the widest possible dissemination of information. 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.

Permission from Tongji University is required for resale outside the institution and for all derivative works for commercial purposes, including compilations and translations (please consult majin.sheji@icloud.com). 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. Authors will be required to obtain and provide permissions to reprint any images, etc., for which they do not hold rights, and authors should ensure that the permissions will be obtainable if and when publication occurs.

**Open access**

Every article appearing in the She Ji: The Journal of Design, Economics, and Innovation is published as open access. This means that the article is universally and freely accessible via the Internet in perpetuity, in an easily readable format immediately after publication. Tongji University and Tongji University Press hold the copyright for all the accepted papers. A mandatory copyright is enabled by production wherein the authors would have to compulsorily transfer the copyrights to the society. The author is not liable for any publication charges as the cost for open access publication is borne by Tongji University and Tongji University Press.

A CC user license manages the reuse of the article (see https://www.elsevier.com/about/policies/open-access-licenses). All articles will be published under the CC BY-NC-ND license: 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.

**Rights Reserved by Author:** As the author, you retain and reserve for yourself a non-exclusive license: 1) to distribute the article for use in your own teaching and research activities, and 2) to publish the article, or permit it to be published, as a part of any book you may write, or in any anthology of which you are an editor, in which the article is included or which expands or elaborates on the Article, unless the anthology is drawn primarily from She Ji. 3) to self-archive the article, under the guidelines found at URL:https://www.elsevier.com/about/company-information/policies/sharing.

**Role of the funding source**

Authors should identify any source of financial support for the conduct of the research and/or preparation of the article. Authors should also 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 paper for publication. If the funding source(s) had no such involvement then this should be stated. Please see https://www.elsevier.com/funding.
**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 and language services**

Authors should write in good, Standard English. Authors may use either USA English (preferred) or UK English, but not a mixture of these. Authors who require information about language editing and copyediting services before submission or after should visit http://webshop.elsevier.com/languageediting or the customer support site at https://service.elsevier.com for more information.

Authors fluent in another language are encouraged to provide a title page including both the paper title and the abstract in the other language in addition to the full English-language manuscript.

**Double-blind Review**

To facilitate the journal's double-blind peer review process, authors should ensure that information about author identities do not appear anywhere in the manuscript. If an author is cited, “Author” and year should be used in the footnotes and reference list instead of the author’s name, paper title, etc. The author’s name should also be removed from the document properties. In Microsoft Word, this is found under the File menu.

**Manuscript template file**

Authors should download and use the template file to prepare their manuscripts: Paper Template for MS Word in .doc format; or Paper Template for MS Word in .docx format.

**Manuscript text format**

Manuscripts should conform to the Documentation Type I (footnotes and reference list system) of Chicago Manual Style, 16th edition (http://www.chicagomanualofstyle.org/tools_citationguide.html), published by the University of Chicago Press. Pages should be numbered consecutively.

**Submission**

Submission to this journal takes place entirely online. Use the following guidelines to prepare your article. Via the homepage of this journal (http://www.journals.elsevier.com/she-ji-the-journal-of-design-economics-and-innovation) you will be guided stepwise through the creation and uploading of the various files.

A Submission should include: 1) Microsoft Word ONLY, 1.5-line-spaced typed manuscript, containing 6,000-8,000 words (excluding footnotes, references, and captions), and images and tables embedded within text and appropriately placed; 2) One title page including, for each author named: current affiliations, email addresses, and if desired, reference to publications; 3) For each author, we request a brief biographical statement of 50–100 words plus author email; biographies will be published on the Contributor’s Page for authors of accepted submissions; 4) high resolution images must be uploaded through the submission system in addition to manuscripts; and 5) Supporting multimedia files, if any, must be submitted in required formats: MPEG and Quicktime.

The system automatically converts source files to a single Adobe Acrobat PDF version of the article, which is used in the peer-review process. Although manuscript source files are converted to PDF for the review process, we require source files for processing after acceptance. All correspondence, including notification of the Editor’s decision and requests for revision, takes place by e-mail and via the author’s homepage. There is no need for a hard-copy paper trail. Authors who are unable to provide a digital version should contact the editorial office by e-mail before submission: majin.sheji@icloud.com.

**Submit your article**

Additional Information
Authors should present tables and figures with captions at the appropriate point within the main body of the manuscript. In addition, authors must upload figures as high-resolution files.

PREPARATION

Peer review
This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

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

Title page (with author details): This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.
Blinded manuscript (no author details): The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

Use of word processing software
Text should appear in single-column format. Authors should keep text format and layout as simple as possible. Formatting codes will be removed and replaced when processing the article. In particular, do NOT use the word processor options to justify text or hyphenate words. DO use bold face, italics, subscripts, superscripts, etc., as necessary. 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 based on the Paper Template (see also the Guide to Publishing with Elsevier: https://www.elsevier.com/guidepublication). Source files for figures, tables, and text graphics will be required whether or not authors embed figures in the text. See also the section on digital illustrations.

To avoid errors, we strongly advise authors to use the "spell-check" and "grammar-check” functions of the word processor.

Article structure
Subdivision
Authors should divide articles into clearly defined sections. Subsections should not be numbered. Any subsection should be given a brief heading. Each heading should appear on its own separate line.

Appendices
Authors that wish to present additional data, such as questionnaires, should present it in an appendix at the end of the manuscript. If there is more than one appendix, these 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.

Authors who wish to exhibit video showcases, should first upload the video file to youtube.com or another online service. Then, they should provide the screenshot, title, URL, and descriptions as indicated in Table 2 in the Paper Template. Authors may also include video files in submissions as supporting material. The preferred formats are MPEG and Quicktime.

Authors are encouraged to submit multimedia files that are essential to the conclusions of the manuscript. She Ji will publish multimedia files, such as 3-dimensional computer models, videos, and interactive demonstrations, as online supplements to the manuscript.

Essential title page information
Title. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae. Title and abstract in another language. Authors fluent in another language are encouraged to provide the paper title and an abstract in the other language in addition
to the full manuscript. These should be attached to the title page. **Author names and affiliations.**

Where an author's 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, and in post-publication correspondence. **Ensure that telephone and telefax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.** The **corresponding author must keep contact details up to date. 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 clearly indicated immediately below the main affiliation address at which the author actually did the work. **Title page template.**

Please download and use the Title Page Template (for **MS Word in .doc format;** or for **MS Word in .docx format**) to prepare your title page.

**Abstract**

*She Ji* requires a concise and factual abstract with a maximum of 200 words. The abstract should briefly state the purpose of the research, the principal results and major conclusions. Abstracts are often presented separately from articles, so they must be able to stand-alone. For this reason, avoid references in abstracts. If a reference is essential, cite author(s) and year(s). Avoid non-standard or uncommon abbreviations. If essential, abbreviations and acronyms must be defined at first appearance in the abstract itself.

**Highlights**

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate file in the online submission system. Please use ‘Highlights’ in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). See [https://www.elsevier.com/highlights](https://www.elsevier.com/highlights) for examples.

**Keywords**

We request authors to provide up to six keywords associated with the paper.

**Acknowledgements**

Authors should collate acknowledgements in a separate section at the end of the article: these must be placed before the references. Do not include them on the title page, in footnotes, or otherwise. Acknowledgements should list individuals who provide help in research such as suggestions on methods and methodology, calculations and statistics, resources and tools. Acknowledgements should also list those who provide help in writing the article, such as language help, writing assistance, or proof reading. It is also appropriate to acknowledge those who provide broader help by reading the article to offer suggestions.

**Footnotes**

*She Ji* uses footnotes to cite sources within the text. Manuscripts should conform to the Documentation Type I (footnotes and reference list system) of Chicago Manual Style: 16th edition.

**Artwork**

**Electronic artwork**

**General points**

Use uniform lettering and sizing in original artwork. Save text in illustrations as “graphics” or enclose the font. Use only these five fonts in illustrations: Helvetica, Arial, Courier, Times, Symbol. Number illustrations according to their sequence in the text. Use a logical naming convention for artwork files. Provide captions for illustrations in a separate document. Produce images close to the size desired in the printed version. Submit each figure as a separate file.

A detailed guide on electronic artwork is available on the Elsevier website: [https://www.elsevier.com/artworkinstructions](https://www.elsevier.com/artworkinstructions)

**Authors are urged to visit this site as some excerpts from detailed information are given here.**

**Formats**
Regardless of the application used, when authors finalise digital artwork, they should “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:** Vector drawings. Embed the font or save the text as “graphics”.
**TIFF:** color or grayscale photographs (halftones): always use a minimum of 300 dpi.
**TIFF:** Bitmapped line drawings: use a minimum of 1000 dpi.
**TIFF:** Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

If digital artwork is created in a Microsoft Office application (Word, PowerPoint, Excel), authors should supply “as is”.

**Please do not:**
Supply files optimised for screen use (like GIF, BMP, PICT, WPG). Resolution is too low; Supply files that are too low in resolution; Submit graphics that are disproportionately large for the content.

**Color artwork**
Authors should ensure that artwork files are in an acceptable format (TIFF, EPS or MS Office files) with the correct resolution. If authors submit usable color figures together with an accepted article, then Elsevier will ensure that these figures will appear in color on the Web (e.g., ScienceDirect and other sites) at no additional charge, whether or not these illustrations are reproduced in color in any printed version.

**Figure captions**
Authors should ensure that each illustration has a caption. Authors must 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 including a rights-holder credit line, as demonstrated in Fig. 1 and Fig. 2 in Paper Template. Keep text to a minimum in the illustrations themselves but explain all symbols and abbreviations used.

**Tables**
Authors should submit tables as editable text and not as images. All tables should be cited in the text. Place tables within the text at the appropriate points, rather than at the end. Tables must be numbered consecutively with Arabic numerals. Place any table notes below the table body and indicate table notes with superscript lowercase letters (also see Paper Template). Avoid vertical rules. Be sparing in the use of tables. Ensure that the data presented in tables do not duplicate results described elsewhere in the article.

**References**
This Journal uses the footnote style and reference list systems (Documentation Type I) of the Chicago Manual Style, 16th edition (CMS: www.chicagomanualofstyle.org/tools_citationguide.html). Authors should follow the detailed instructions and examples in Paper Template.

Footnotes should be numbered consecutively, with references to footnotes indicated by numbers inserted in the text. Style should conform to CMS footnote style. Quotations from foreign language sources should be translated into English in the text. If necessary, original-language quotes may appear in footnotes.

Use a reference list at the end of the article, ordered alphabetically by last name of the first author. Use the Chicago Manual of Style reference format.

**Citation in text**
The reference list should include only works cited in the text that have been published or accepted for publication. References cited in the abstract must be given in full. Unpublished results, unpublished reports, and personal communications should not appear in the reference list, but may be cited in the text in footnotes. The designation “in press” in the reference list means that the item listed has been accepted for publication.

**Web references**
For web references, authors must provide a full URL and the date when the reference was last accessed. Any other available information should be provided if it is visible on the web site. This includes author, dates, publishers, references to source publication, or DOI.
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 to the current issue
Authors should ensure that the words ‘this issue’ appear in any references or footnote citations that mention other articles in the same issue of the journal.

Reference management software
This journal has standard templates available in key reference management packages EndNote (http://www.endnote.com/support/enstyles.asp) and Reference Manager (http://refman.com/support/rmstyles.asp). Using plug-ins to word processing packages, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style which is described below.

Reference style
The following examples illustrate citations using footnotes and the reference list system. For each citation, we provide both the footnote format (F) and the reference format (R) are provided. Please note the difference between the two. For more details and many more examples, see chapter 14 of The Chicago Manual of Style, 16th Edition.

• Book: Authored book

F:


R:


• Book: Edited book

F:


R:


• Book: English translation

F:

R:


- Book: Electronic book

F:


R:


- Chapter or article in an edited book

F:


R:


- Journal article: One author

F:


R:


- Journal article: Two or three authors

F:


R:


- Journal article: Four or more authors

R:

• Article in an online journal

F:

R:

• Non-English journal article

F:

R:

• Article in a print proceedings

F:

R:

• Article in an electronic proceedings

F:

R:

- Article in print magazine or newspaper
  
  
  **R:**

- Article in the online magazine or newsletter
  
  **F:**
  
  **R:**

- Published thesis or dissertation
  
  **F:**
  
  **R:**

- Unpublished or informally published materials
  
  **F:**
  2. Patricia Burns, e-mail message to author, December 15, 2008.
  
  **R:**
  Only use footnote. Do not enter in reference list.
- Website

**F:**


**R:**


- Web page with known author and date

**F:**


**R:**


- Blog

**F:** 1. Amy Frearson, “Reconstruction of Nahr el-Bared Refugee Camp,” Dezeen (blog), May 2, 2013 (7:49 p.m.), http://www.dezeen.com/2013/05/02/reconstruction-of-nahr-el-bared-refugee-camp/.

**R:**


- Online multimedia

**F:**


**R:**


**R:**


- Report

**F:**


**R:**


- Exhibition catalog

**F:**


**R:**


**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
It is hoped that this list will be useful during the final checking of an article prior to sending it to the journal’s Editor for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:
One Author designated as corresponding Author:
• E-mail address
• Full postal address
• Telephone and fax numbers

All necessary files have been uploaded:
• Abstract
• Keywords
• 3-5 highlights bullet points (e.g. see Design Studies: http://www.sciencedirect.com/science/journal/0142694X)
• Separate Title page file containing authors’ names and affiliations
• Manuscript without authors’ names (for double-blind review compliance)
• Brief biographical statement of 50–100 words

Further considerations:
• Manuscript has been “spellchecked” and “grammar-checked”
• References are in the correct format for this journal
• All references mentioned in the Reference list are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Web)
• Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print or to be reproduced in color on the Web (free of charge) and in black-and-white in print

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

AFTER ACCEPTANCE
Use of the Digital Object Identifier
The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. This is an ideal medium for citing a document, particularly ‘Articles in press’ that do not yet have full bibliographic information. The correct format for citing a DOI is shown as follows (example taken from a document in the journal Physics Letters B):
https://doi.org/10.1016/j.physletb.2010.09.059

Using the DOI to create URL hyperlinks to documents on the web ensures that these links will never change.
Proofs
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author or a link will be provided in the e-mail so that authors can download the files themselves. (If we do not have an e-mail address then paper proofs will be sent by post) Elsevier now provides authors with PDF proofs that can be annotated. To use this function, authors must download Adobe Reader version 7 (or higher). It is available free from http://get.adobe.com/reader. Instructions on how to annotate PDF files will accompany the proofs. (Instructions are also given online). The exact system requirements are given at the Adobe site: http://www.adobe.com/products/reader/systemreqs.

If authors do not wish to use the PDF annotations function, they may list corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list corrections quoting line number. If this is not possible for any reason, authors should mark the corrections and other comments (including replies to the Query Form) on a printout of the proof and return by fax, or scan the pages and e-mail them, or return these by post. Authors should only use this proof for checking the typesetting, editing, completeness and correctness of the text, tables and figures. At this stage, significant changes to the article accepted for publication will only be considered with permission from the Editor. We will do everything possible to publish article quickly and accurately – we request that authors submit all proof corrections within 48 hours. It is important to ensure that all corrections are sent in one communication: authors should check carefully before replying as inclusion of any subsequent corrections to the article cannot be guaranteed. Proofreading is the author’s responsibility.

Offprints
The corresponding author will be notified and receive a link to the published version of the open access article on ScienceDirect. This link is in the form of an article DOI link which can be shared via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's Author Services.

AUTHOR INQUIRIES
Authors can track the submitted article at https://www.elsevier.com/track-submission. Authors can track accepted articles at https://www.elsevier.com/trackarticle. Authors can also check our Author FAQs (https://www.elsevier.com/authorFAQ) or contact Customer Support via https://service.elsevier.com.