

Instructions for Authors

June 2, 2021

Frontiers of Mechanical Engineering is an international peer-reviewed academic journal sponsored by the Chinese Academy of Engineering, administered by Higher Education Press and Huazhong University of Science and Technology, and jointly published by Higher Education Press of China and Springer on a quarterly basis in English.

The journal publishes primarily research article and review article by following the peer-review system. Two reviewers are requested in the relevant study fields, and review feed-back will usually take about one month.

The most important things of the followings:

- 1. All figures and tables cited must have obtained the authorizations from the original papers or their publishers;**
- 2. Manuscripts should be in a **Word format** and **single column**;**
- 3. Equations and variables must be input with MathType rather than the tool embedded in Word;**
- 4. Please insert pictures (over 300 dpi) and tables into the article, and simultaneously upload the picture files separately to the system;**
- 5. More than 30 references should be cited in the article, in which references published in recent two years must occupy higher than 20%. Non-English References must be less than three.**

1. Duplicate/previous publication or submission

Manuscripts submitted to this journal must not be under simultaneous consideration by any other publisher and should not have been published elsewhere in substantially similar form. No part of a paper which has been published by *Frontiers of Mechanical Engineering* may be reproduced or published elsewhere without the written permission of the publisher.

2. Permissions

Authors wishing to include figures, tables, or text passages that have already been published elsewhere are required to obtain permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.

3. Article Categories

The following categories of papers can be submitted to the journal:

RESEARCH articles describing original investigations relevant to mechanical engineering;

REVIEW articles giving an in-depth overview of certain topic or a review of one's own work or work of a laboratory or a group of researchers;

FEATURE articles providing an overview on certain topic written by well known scientists in the field.

4. Manuscript preparation and submission requirements

4.1 Manuscript submission

Authors are encouraged to submit their papers electronically via the online submission system (<http://mc.manuscriptcentral.com/fome>). The web site guides authors stepwise through the creation and uploading of the various files. Note that original source files, *not PDF files*, are required. Once the submission files are uploaded, the system automatically generates an electronic (PDF) proof, which is then used for reviewing. All correspondence, including the editor's decision and request for revisions, will be by e-mail. After reviewing process, the manuscript will be finally judged by one of the editors who have the right to accept or reject a paper.

4.2 Submission requirements

1) Cover letter

A covering letter must accompany each submission indicating the name, address, and telephone number of the author to whom all correspondence is to be addressed. An affiliation must be supplied for each author. Authors are also asked to provide the names and contact information for four potential referees in their cover letter. However, the journal is not obliged to use the suggested reviewers. Final selection of reviewers will be determined by the editors.

2) Manuscript for research articles

Manuscripts should be in a **Word format** and **single column**. The following components are required for a complete manuscript: Title, Author(s), Author affiliation(s), Abstract, Keywords, Main text, Figures, Tables, Acknowledgements, References, Appendices and Notation (when needed). Include page numbers on the

document, beginning with the title page as number 1. It will be preferred if line numbers are included as well. There is no formal limit for the length of a paper, but the editors may recommend condensation when appropriate.

Please use standard 10- or 12-point Times New Roman fonts.

3) Title

The title of the paper should be explicit, descriptive and as brief as possible—No more than 20 words in length.

Integrated control strategies for railway vehicles with independently-driven wheel motors

4) Running title

A short version of the paper title (up to 80 characters including space).

5) Author names, (academic degrees) and affiliations.

Example: Jinzhi FENG, Jun LI, R. M. GOODALL

6) Corresponding author

The e-mail address of the corresponding author should be given on the first page of the manuscript. In the case of multiple authors, one should be designated as the corresponding author.

7) Abstract

A short abstract of up to 300 words written in one paragraph, clearly indicating the object and scope of the paper as well as the results achieved, should appear on the first page.

8) Keywords

Up to 6 words separated by commas.

9) Headings and subheadings

Headings and subheadings should be used throughout the text to divide the subject matter into its important, logical parts. Typical headings include: Introduction, Materials and methods, Results, Discussion, Conclusions, Acknowledgments, Appendixes and References.

10) Tables

Authors should take notice of the limitations set by the size and layout of the journal. Large tables should be avoided. Reversing columns and rows will often reduce the dimensions of a table.

If many data are to be presented, an attempt should be made to divide them over two or more tables.

In a three-line table, the first row represents the title of each column, **which can be wrote as (take Column 1 as an example) Title of Column 1 = Column 1 Row 2, Column 1 Row 3, ..., Column 1 Row n .**

Table 1 Table title

Title of Column 1	Title of Column 2	...	Title of Column n
Column 1 Row 2	Column 2 Row 2	...	Column n Row 2
Column 1 Row 3	Column 2 Row 3	...	Column n Row 3
...
Column 1 Row n	Column 2 Row n	...	Column n Row n

Note: .

- (1) Avoid using a title with broad meaning as the table title. For example, “Results of the Hopkinson pressure bar experiment” is better than “Experimental result”. The title should be specific enough.
- (2) Supply units of measure at the heads of the columns, such as $v/(m\ s^{-1})$, l/mm , and $\alpha/(^\circ)$. Abbreviations that are used only in a table should be defined in the footnotes to that table.
- (3) Should always use rows and columns to correlate two variables. Do not embed tables as graphic files, document objects, or pictures.
- (4) Submitted as three-line tables, that is, there are three horizontal lines: one under the legend, one under the column heads, and one below the body. Vertical lines are generally not used.
- (5) Label each table at the top with a Roman numeral followed by the table title. Insert explanatory material and footnotes below the table. Designate footnotes using lowercase superscript letters (^a, ^b, ^c) reading horizontally across the table.
- (6) Unless needed, all the words within the tables should capitalize the first letter.
- (7) Must be sequentially numbered and called out in the text as, e.g., Table 1, Tables 1–5, Tables 1 and 2, and so on.

11) Figures

Graphs should be practically self-explanatory. Readers should be able to understand them at a glance. Dimensional drawings and diagrams should include only the essential details and as little lettering as possible. They should present more of a picture than a working drawing.

- (1) **Figure title:** Avoid using a title with broad meanings as the figure title. For example, “Results of the Hopkinson pressure bar experiment” is better than “Experimental result”. The title should be specific enough. Include a title for each figure (a brief phrase, preferably no longer than 10 to 15 words). Use (a), (b), (c)... to give titles for subfigures if there are any.

- (2) **Size:** should be drawn in the size of they virtually appear.
- (3) **Numbering:** Number all figures (graphs, charts, photographs, and illustrations) in the order of their citation in the text and cited as Fig. 1 (full version is used at the beginning of a sentence, Figures 1–3), Figs. 1–3, Figs. 1 and 2, Figs. 1(a)–1(c), and so on.
- (4) **Figure quality:** Should be sharp, noise-free, and of good contrast. All lettering should be large enough to permit legible reduction. The figure quality should meet the requirements as shown below:

Figure category	dpi
Images	
color	300
mono	600
Screen	72
Line-drawing	600

- (5) **Color of figures:** Unless necessary, better drawn in black and white for line-drawing; and grayscale for images.
- (6) **Figure file formats and location in manuscript:** Should be embedded in JPG., TIFF., EPS., or CorelDraw file formats. Legends should appear, separate from the figures themselves, where the figures should be located within the paper.
- (7) **Maps:** Unless necessary, maps are not suggested to appear in the article. If necessary, please use the authorized maps as the basis for map figure drawing. (Like maps published by China Map Press, and the like.) Any maps drawn without an authorized basis have to be submitted with the certificate from the Surveying and Mapping management. All the maps should follow the publishing requirements released by the Government.
- (8) Unless needed, all the words within the figures should capitalize the first letter.

12) Formulae and equations

- (1) Formulae should be typewritten in MathType whenever possible.
- (2) It is extremely important that all mathematical symbols and letters used are identified and listed and that the required style of appearance of such symbols is clearly indicated, e.g., bold face, italics, script, outline, etc.
- (3) Subscripts and superscripts should be set off clearly.
- (4) Identify in the margin any symbols that might be confused with similar symbols.
- (5) The words Equation or Equations should appear in full at the beginning of sentences but be abbreviated to Eq. or Eqs. elsewhere when you want cite an equation or equations. For example, “Equation (1) represent ...”, “It is shown in Eqs. (1)–(3) that ...”, “It is shown in Eqs. (1) and (2)...”.
- (6) A nomenclature can be included (with the use of = signs) after the abstract if there

is a significant number of symbols in the paper.

(7) Equations should be located separately from other lines if they are long or complicated.

13) Abbreviations

Do not just use abbreviations as titles of sections, figures, and tables. However, abbreviations can be included in a title. Limit their use in the text. When non-standard acronyms and initialisms appear more than once in the abstract and the main text, provide their full meaning at first mention (with the acronym or initialism indicated in parentheses), and then use the acronym or initialism alone in subsequent mentions. Otherwise, simply provide their full meaning.

14) Footnotes

Footnotes should only be used if absolutely essential. In most cases it will be possible to incorporate the information in normal text. If used, they should be numbered in the text, indicated by superscript numbers, and kept as short as possible.

15) Units of measure

Laboratory values are expressed using conventional units of measure, with relevant Système International (SI) conversion factors expressed secondarily (in parentheses) only at first mention. In tables and figures, a conversion factor to SI should be presented in the legend. The metric system is preferred for the expression of length, area, mass, and volume. For more details, see the Units of Measure conversion table (absent).

16) Acknowledgements

The Acknowledgements section is the general term for the list of sponsor and financial support, contributions, credits, and other information included at the end of the text of a manuscript but before the references. Conflicts of interest and financial disclosures must be listed in this section. Authors should obtain written permission to include the names of individuals in the Acknowledgements section.

17) Appendixes (if needed)

Appendix A

A1, A2, A3...

Appendix B

Appendix C...

Manuscript for review articles

Reviews give a general overview of a particular field, providing the reader with an

appreciation of the importance of the work, historical context, a summary of recent developments, and a starting point in the specialist literature. Manuscripts should be divided into appropriate sections, with an extensive list of references. In addition to undergoing the same rigorous level of technical peer-review as Research papers, Review articles will be critiqued based on the general impact of the field being reviewed, the relevance of the field to experimental mechanics, preexisting reviews of the field, and acknowledgement of the contributing author as a dominant figure in the field. Therefore, it is strongly recommended that authors interested in submitting a Review article correspond with the Editor prior to submission. General formatting text, illustrations, and references are the same as outlined for research papers.

18) Citations and References

In-text citations must agree with the references in numbering. The references should be presented completely and without mistakes, and should be the original publication. Detailed format requirement can be found in the file "Format for references.doc".

(1) Reference for journals

Man Z, Wang W, Khoo S, et al. Optimal sinusoidal modeling of gear mesh vibration signals for gear diagnosis and prognosis. *Mechanical Systems and Signal Processing*, 2012, 33: 256–274

Lv Z, Zhang W, Xu J. A denoising method based singular spectrum and its application in machine fault diagnosis. *Chinese Journal of Mechanical Engineering*, 1999, 35(3): 85–88

(2) Reference for books

Gaydon A G, Wolfhard H G. *Flames*. 2nd ed. London: Chapman and Hall Ltd., 1960, 30–35

Norman I J, Redfern S J, eds. *Mental Health Care for Elderly People*. New York: Churchill Livingstone, 1996

(3) Reference for proceedings

Dmtriev V. Complete tables of the second rank constitutive tensors for linear homogeneous bianisotropic media described by point magnetic groups of symmetry and some general properties of the media. In: *Proceedings of IEEE MTT-S IMOC'99*. Berlin: Springer, 2000, 435–439

Cecil T E, Chern S S. Dupin submanifolds in Lie sphere geometry. In: Jiang B J, Peng C K, Hou Z X, et al., eds. *Differential Geometry and Topology. Lect Notes in Math, Vol 1369*. Berlin: Springer-Verlag, 1989, 1–44

The digital object identifier (DOI) may be used to cite and link to electronic documents. Consisting of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication, DOI is an ideal medium for citing a document, particularly "Articles in press" because they have not yet received their full bibliographic information. The correct format for citing a DOI is shown as follows (example taken from a document in the *Communications in Nonlinear Science and Numerical Simulation*): doi:10.1016/j.cnsns.2007.05.034

4.3 Notification

The corresponding author will be notified by the editors of the acceptance of article and invited to supply an electronic version of the accepted text, if this is not already

available.

4.4 Copyright transfer

No article can be published unless accompanied by a signed Copyright Transfer Statement, which ensures a transfer of copyright from author to publisher. A copy of the Copyright Transfer Statement to be used will be provided with the letter of acceptance of the manuscript. Authors are asked to scan and return by email or fax the signed statement to the editorial office of *Frontiers of Mechanical Engineering* at the Academic Publishing Division of the Higher Education Press.

4.5 Proofreading and production

Proofing

Proofs will be sent to the author and should be returned within the required time. Authors should clarify any questions of the proof in a query file. No new materials shall be inserted at the time of proofreading. Please note that authors are urged to check their proofs carefully before return one all-inclusive e-mail or fax, since subsequent additional corrections will not be possible.

Author Enquiries

For submission inquiries, tracking articles and any information please contact the *Frontiers of Mechanical Engineering* Editorial Office in Higher Education Press. All correspondence for the journal should be sent to the following address. Please include the manuscript dispatch number in all correspondences.

Author Benefits

The articles enjoy a fast peer-review and production workflow and will be published more quickly with the online first publishing on the basis of individual articles. The submitted manuscripts will get polished in language by highly qualified editors before typeset.

Research Data Policy

The journal encourages authors, where possible and applicable, to deposit data that support the findings of their research in a public repository. Authors and editors who do not have a preferred repository should consult Springer Nature's list of repositories and research data policy.

[List of Repositories](#)

[Research Data Policy](#)

General repositories - for all types of research data - such as Figshare and Dryad may also be used. Datasets that are assigned digital object identifiers (DOIs) by a data repository may be cited in the

reference list. Data citations should include the minimum information recommended by DataCite: authors, title, publisher (repository name), identifier.

[DataCite](#)

Springer Nature provides a research data policy support service for authors and editors, which can be contacted at researchdata@springernature.com.

This service provides advice on research data policy compliance and on finding research data repositories. It is independent of journal, book and conference proceedings editorial offices and does not advise on specific manuscripts.

[Helpdesk](#)

Ethical Responsibilities of Authors

This journal is committed to upholding the integrity of the scientific record. As a member of the Committee on Publication Ethics (COPE) the journal will follow the COPE guidelines on how to deal with potential acts of misconduct.

Authors should refrain from misrepresenting research results which could damage the trust in the journal and ultimately the entire scientific endeavour. Maintaining integrity of the research and its presentation can be achieved by following the rules of good scientific practice, which includes:

- The manuscript has not been submitted to more than one journal for simultaneous consideration.
- The manuscript has not been published previously (partly or in full), unless the new work concerns an expansion of previous work (please provide transparency on the re-use of material to avoid the hint of text-recycling (“self-plagiarism”)).
- A single study is not split up into several parts to increase the quantity of submissions and submitted to various journals or to one journal over time (e.g. “salami-publishing”).
- No data have been fabricated or manipulated (including images) to support your conclusions
- No data, text, or theories by others are presented as if they were the authors own (“plagiarism”). Proper acknowledgements to other works must be given (this includes material that is closely copied (near verbatim), summarized and/or paraphrased), quotation marks are used for verbatim copying of material, and permissions are secured for material that is copyrighted.
Important note: the journal may use software to screen for plagiarism.
- Consent to submit has been received from all co-authors and responsible authorities at the institute/organization where the work has been carried out *before* the work is submitted.

- Authors whose names appear on the submission have contributed sufficiently to the scientific work and therefore share collective responsibility and accountability for the results.

In addition:

- Changes of authorship or in the order of authors are not accepted *after* acceptance of a manuscript.
- Requests to add or delete authors at revision stage or after publication is a serious matter, and may be considered only after receipt of written approval from all authors and detailed explanation about the role/deletion of the new/deleted author. The decision on accepting the change rests with the Editor-in-Chief of the journal.
- Upon request authors should be prepared to send relevant documentation or data in order to verify the validity of the results. This could be in the form of raw data, samples, records, etc.

If there is a suspicion of misconduct, the journal will carry out an investigation following the COPE guidelines. If, after investigation, the allegation seems to raise valid concerns, the accused author will be contacted and given an opportunity to address the issue. If misconduct has been proven, this may result in the Editor-in-Chief's implementation of the following measures, including, but not limited to:

- If the article is still under consideration, it may be rejected and returned to the author.
- If the article has already been published online, depending on the nature and severity of the infraction, either an erratum will be placed with the article or in severe cases complete retraction of the article will occur. The reason must be given in the published erratum or retraction note.
- The author's institution may be informed.

Editorial Office of *Frontiers of Mechanical Engineering*

Division of Natural Science Academic Publishing, Higher Education Press, No. 4 Huixindongjie, Beijing 100029, China

E-mail: guott@hep.com.cn (Tingting GUO)

Tel: 86-10-58581834 Fax: 86-10-58556034



<http://www.springer.com/journal/11465>

Frontiers of Mechanical Engineering

ISSN: 2095-0233 (print version)

ISSN: 2095-0241 (electronic version)

Journal no. 11465