

TRANSACTIONS of THE INDIAN INSTITUTE of METALS

Guidelines to Authors

1. Legal requirements

Submission of a manuscript implies: that the work described has not been published before; that it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities – tacitly or explicitly – at the institute where the work has been carried out. The publisher will not be held legally responsible should there be any claims for compensation.

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) 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.

Authors will be asked to transfer copyright of the article to the Society (or grant the Publisher exclusive publication and dissemination rights). This will ensure the widest possible protection and dissemination of information under copyright laws. Authors should also state that they have full control of all primary data and that they agree to allow the journal to review their data if requested.

2. General

The Transactions of The Indian Institute of Metals (TIIM) is devoted to the publication of original articles that contribute to the advancement of knowledge in any branch of metallurgy, materials science and engineering and allied subjects. The articles are published under **two categories**:

Original Article, presenting original work and embodying the results of extensive theoretical, laboratory, simulation, plant or field investigations. **The text part of Original articles should be less than 4000 words length (including abstract, introduction to references and tables) and a maximum of 10 figures.**

Review Article, reflecting the author's perception and views on a topic of his expertise, with emphasis on the Indian materials science and technology scenario wherever relevant. **The text part of Review articles should be less than 8000 words length (including abstract, introduction to references and tables) and a maximum of 20 figures.**

3. Manuscript submission

Manuscripts are submitted to TIIM online via Springer Editorial Manager. This will allow for quick and efficient processing of your manuscript. Please log directly onto the Editorial Manager site at <http://www.editorialmanager.com/tiim/> and upload your manuscript files following the instructions provided on the screen. **Submit the text part of your manuscript in either MS word or pdf format. Submit each figure, one by one, in the .tiff format and with 300 dpi resolution.**

Note: If you have already registered on Editorial Manger, please use your provided username and password and log in as 'Author' to track your manuscript or to submit a NEW manuscript. (Do not register again as you will then be unable to track your manuscript). If you are a new author, click the 'Register' button and enter the requested information. Upon successful registration you will be sent an e-mail with instructions to verify your registration.

The revised manuscript can also be submitted using the same personal user id and password. If you have any questions or are unable to submit your manuscript online via Editorial Manager, please contact the Editorial Manager at: **em@editorialmanager.com**

4. Editorial process

All manuscripts submitted to the Journal would be checked for plagiarism and only those which pass this check will be considered for the review process. Those which do not pass the plagiarism check would be withdrawn with a note sent to the corresponding author.

The Editorial Manager would assign each manuscript to an Editorial Board member, who is responsible for the peer-reviewed and decision on the manuscript. The Editorial Board reserves the right to revise or modify articles to conform to the journal's style.

After online publication, further changes can only be made in the form of an Erratum, which will be hyperlinked to the article. Any ethical violation may lead to a published retraction of the printed article.

5. Manuscript preparation

Title page

The title page should include:

- The name(s) of the author(s)
- A concise and informative title
- The affiliation(s) and address(es) of the author(s)
- The e-mail address of the corresponding author

Abstract

Provide a structured abstract of **150 words (max.)** that states the main purpose of research, methodology and main findings. The abstract should not contain undefined abbreviations or references. The first time an abbreviated term is used, spell it out in full and follow with the abbreviation in parentheses – for example: ultrasound (US).

Keywords

Provide 4 to 6 keywords that can be used for indexing purposes.

Text

Organize the text into an introductory section that conveys the background and purpose of the report, and then into sections of experimental details, results and discussion, conclusions, acknowledgements, references followed by tables and figures.

The text part of Original and Review articles (including abstract, introduction to references and tables) should be less than 4000 and 8000 words length, respectively.

Heading levels, numbering

Do not use more than three levels of displayed headings.

Abbreviations and acronyms

Abbreviations should be defined at first mention and used consistently thereafter.

Equation

Please use the standard mathematical notation for formulae, symbols etc.:

- **Italic** for single letters that denote mathematical constants, variables, and unknown quantities
- **Roman** for numerals, operators, and punctuation, and commonly defined functions or abbreviations, e.g., cos, det, e or exp, lim, log, max, min, sin, tan, d (for derivative)
- **Bold** for vectors, tensors, and matrices.

Acknowledgments

Acknowledgments of individuals (other than the authors) should be placed in a separate section before the reference list. The acknowledged individuals should have extended their direct help to the reported study and the names of funding organizations should be written in full.

Tables

- All tables are to be numbered using Arabic numerals; e.g., 1, 2, 3, 4 etc..
- Tables must be cited in the text as consecutive numbers in order of their appearance.
- Each table needs to have a 'Table Heading' immediately above its presentation. This Table Heading (also referred to as the 'Table Title') should explain clearly and concisely the components of the table.

- Identify any previously published material by giving the original source in the form of a reference at the end of the Table Heading.
- Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and be included beneath the table body.

Figures

- **All figures need to be submitted individually, on by one, in .tiff format in 300 dpi resolution.**
- All figures are to be numbered using Arabic numerals; e.g., 1, 2, 3, 4 etc.
- Figure parts should be denoted by lowercase letters; e.g., a, b, c, d, etc.
- Figures should be in consecutive numerical order within the text.
- A Figure Caption is necessary for each figure.
- All elements of a figure (i.e., parts a, b, c etc.) need to be identified in the Figure Caption.
- Identify any previously published material by giving the original source in the form of a reference at the end of the Figure Caption.
- All computer-generated graphs should be supplied as either (i) EPS files, ensuring that the lines used in the graphs are more than 0.1 mm, with a minimum resolution of more than 1200 dpi, or as (ii) high resolution *.tiff files.
- The axes of graphs need to have (i) text descriptors, and (ii) the engineering units of the measurement. (Note that in some cases the units may be dimensionless.)

Micrographs and images

- Micrographs and images of samples require a scale bar that is of professional standard. (Note that the scales bars provided by the equipment often lack adequate resolution.)
- Features on images that show morphological features referenced in the text need to be distinctly indicated.

Units

SI units with standard abbreviation are mandatory.

References

- References in the text need to be indicated by square brackets and are presented sequentially; i.e., [1], [2], [3] etc.
- References may be grouped; i.e., [3-6], but block referencing, where more than 4 references are presented to support the text, is ill-advised.
- Names of books or periodicals should be typed in *italics*. The issue number of a periodical must be omitted unless each issue is paginated separately.
- The page number or chapter number of a book should be indicated unless the whole book is cited as a reference.
- Names of all authors (and all editors for edited books and proceedings) must be given.
- Use the standard abbreviation of a journal's name according to the ISSN List of Title Word Abbreviations, see <http://www.issn.org/2-22661-LTWA-online.php>^[annon1]

The bibliographic data in the list of references must be complete and should be presented according to the following examples. DOI identification is strongly encouraged.

Specific examples:

1. Song B, Murray JW, Wellman RG, Pala Z & Hussain T, Dry sliding wear behaviour of HVOF thermal sprayed WC-Co-Cr and WC-CrxCy-Ni coatings, *Wear*, 442-443 (2020) 203114, 10 pp. <https://doi.org/10.1016/j.wear.2019.203114>

If more than 5 authors.

2. Meghwal A, Anupam A, Murty BS, Berndt CC & Ang ASM, 'Thermal Spray High-Entropy Alloy Coatings: A Review', *J. Thermal. Spray Technol*, 29 (2020) 857-893. doi.org/10.1007/s11666-020-01047-0

Books

3. Murty BS, Yeh J-W, Ranganathan S & Bhattacharjee PP, *High Entropy Alloys*, 2nd Edition, Elsevier, 16th Match 2019, 388 pp, Paperback ISBN: 9780128160671,

<https://doi.org/10.1016/C2017-0-03317-7>

Theses

4. Berndt CC, Thermal Spray Coatings: Processing, Microstructural Architecture and their Materials Engineering Design, DEng Thesis, Monash University (Melbourne, Australia) 2014, 400 pp.
<https://tinyurl.com/Berndt-DEng-Thesis>, accessed 27th July 2021

Web sites

5. Transactions of the Indian Institute of Metals, Submission guidelines,
<https://tinyurl.com/TIIMGuidelines>, accessed 27th July 2021

Styles that are not desirable (since it is difficult to find these sources) include:

6. Banerjee D, Unpublished research (1992).
7. Gupta CK, Personal communication (1991).

6. After manuscript acceptance

Upon acceptance of your article it will be edited, typeset and sent to the corresponding author for his/her final approval. The finalized articles would be available online at www.springerlink.com and a Pdf would be provided to the author for his/her academic use.

7. Colour in print

Online publication of colour illustrations is free of charge. For colour in the print version, authors will be charged for the actual cost, which would be available on request.

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Transactions of the Indian Institute of Metals

Editor-in-Chief: Murty BS

ISSN: 0972-2815 (print version) ISSN: 0975-1645

(electronic version) journal no. 12666



<http://www.springer.com/journal/12666>

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Editor-in-Chief: Murty, B.S.

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