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Guideline for authors to prepare manuscripts for Materials Testing

Abstract: Materials Testing has a has been published since more than 60 years and has a very streamlined process for the manuscript preparation and publication process. These guidelines are exactly in the style as the main manuscript should be submitted and help to prepare the manuscript as well as tables and figures in a way that manuscripts can be published fast and efficiently. Please, note that following these guidelines exactly and without any exception is mandatory for submitting a manuscript. Manuscripts will be pre-screened by the Editor-in-Chief (EiC) for fitting to the scope of the journal, style, English language and preparation of text, references, figures and tables. Manuscripts not prepared exactly in line with these guidelines and not being written in excellent English will not even be pre-screened and will be rejected. To ensure high-quality English, consulting an editing office or a native speaker might be necessary.

Please, note that due to the large number of yearly submitted manuscripts pre-screening will be made as quickly as possible, but might take a while, i. e. up to eight weeks. Please, refrain from requests about your manuscript within this time. If you do not hear anything about your paper within eight weeks after submission, you might contact the EiC. Please, refrain from any emailing to the Editorial Board or the Publishing Office.

The main manuscript has to be submitted as a complete word file including and placing tables and figures where they are referred to. Style and format of these author's guidelines exemplify how a correctly formatted manuscript should look like before submission.

Any manuscript should cover at least one of the following categories:

Mechanical Testing, Fatigue Testing, Fracture Mechanics Testing, Corrosion Testing, Wear Testing, Fire resistance testing, Non-destructive Testing, Testing for Joining or Additive Manufacturing Applications, Testing related to Production techniques, Component Testing, Fractography, Materialography, Metallurgy, Testing of Physical and Mechanical Properties, Materials Modelling

Manuscripts not related to the scope of the journal are at risk to be rejected.

1. Editorial policies

1.1 Unpublished material

Submission of a manuscript to Materials Testing implies that the work described is not copyrighted, published, or submitted elsewhere, except in abstract form. The corresponding author should ensure that all co-authors approve the manuscript before its submission.

Ethical conduct of research. The authors must describe and confirm the safeguards put in place to meet ethical standards where applicable. The authors must describe and confirm the safeguards put in place to meet ethical standards where applicable.

Conflict of interest. When authors submit a manuscript, they are responsible for recognizing and disclosing financial and/or other conflicts of interest that might bias their work and/or could inappropriately influence their judgment. If no acknowledgement is given, the Publishers assume that no such conflict of interest exists.

Copyright. Manuscripts are accepted on the condition of a transfer of copyright (for U.S. government employees: to the extent transferable) to Materials Testing. Once the manuscript is accepted, it may not be published elsewhere without the consent of the copyright holders.

Authorship changes. As per De Gruyter policy, no author list changes (addition/deletion) are permitted after acceptance of an article.

Cover letter. Each manuscript should be accompanied by a cover letter briefly highlighting the three most important features or results of the contribution and reasons, why the paper should be published in Materials Testing. Usage of the box provided under Scholar1 for the cover letter is mandatory. Authors should refrain from providing cover letters separately or submitting those by email.

2. Submission of manuscripts

Manuscripts have to be written in MS-Word. Illustrations should be prepared accordingly to the instructions below. Tables and figures should be included in the main document. The main document has to be uploaded in Scholar 1. Note that the review will be carried out only on the uploaded version of the main document. In addition, figures should be uploaded as separate files in their original format, i. e. as source file. Since the review will be carried out only on the main word document including tables and figures, authors are responsible that the separately uploaded tables and figures do not differ from those included in the main document. Manuscripts submitted as pdf files will be rejected. Please refrain from submitting any incomplete manuscripts and/or not prepared exactly according to these guidelines. Once a manuscript has been submitted, it will be prescreened. Manuscripts failing the pre-screening will be rejected by notification of the authors, usually within about two months. Manuscript passing the pre-screening will be subjected to reviewing without further note to the authors.

As Materials Testing is a journal of international rank, please, note that manuscripts not being prepared by following exactly these instructions will not be pre-screened, will be disregarded, not responded to and, especially, and will not be forwarded to reviewing. Thus, authors should refrain from submitting insufficiently prepared papers. Manuscripts should generally be prepared as technical/scientific paper, i. e. please adhere to the following common sections such

Abstract

Keywords

1. Introduction

2. Experimental and/or Theoretical approach

3. Results and discussion

4. Conclusions

Acknowledgement

Funding

References

The authors of this contribution

The complete article should then be uploaded in the Scholar 1 system. Please note that any manuscript submitted via agencies will not be accepted. The submitting person should be the corresponding author.

3. Manuscript preparation

Page size should be A4 with 2.5 cm / 1 inch margins. The general text of the article should be written in Arial, 12 pt. with 1.5 line spacing. Please select sufficient chapters in a readable and logical manner, as recommended above. Do not insert the beginning of the first line of a paragraph. Please use one line spacing between the paragraphs as well as between the last paragraph and the next heading and between a heading and the first paragraph. Headings should be numbered as shown here and should be written in bold letters and also in Arial, 12 pt. with 1.5 line spacing.

Do not use any automated numbering and referencing of headings, sub-headings, tables, figures, equation or references in the main word document. This will extremely retard the production process of your manuscript.

Never use the first person singular or plural in the main text. Especially, if you refer to authors own work, use passive tense and reference own preceding work correctly.

3.1 Sub-headings

These should appear at the beginning of the first line of the first paragraph, also written in bold Arial, 12 pt. with 1.5 line spacing and ending with a full stop like shown here. Please use the decimal system for subsections as shown here. Do not use any further sub-divisions of your paper, as this confuses the readers.

3.2 Items above the main text

Author(s):

With first names in full, Arial 14 pt, bold letters, in italics, as shown above.

Title:

Words in lower case (see above), Arial 22 pt, bold. A subtitle is possible, Arial 14pt in italics, as shown above.

Abstract: About 10 to 20 lines written in Arial 12pt (see above), including primary objective, research design, methods and procedures, experimental processes, main outcome and results, conclusions (very brief). Do not use abbreviations or references in the abstract.

Five Keywords: Please, chose keywords that directly reflect the content of the paper. Refrain from providing too detailed keywords and from abbreviation of keywords. Please, capitalize only the first letter of only the first keyword.

3.3 Language and style

Note, that it is mandatory to provide your manuscript in excellent and understandable English (preferably in American English). This includes the tables and figures as well as the respective captions. Please refrain from any submission of poorly written papers, since these will be rejected immediately. For ascertaining excellent English, it is highly recommended to consult proven experts or native speakers. Otherwise get in touch with the Language Editors at De Gruyter directly to discuss details [https://De Gruyter-authorservices.peerwith.com/](https://DeGruyter-authorservices.peerwith.com/).

3.4 Abbreviations

All abbreviations should be spelled out the first time they are introduced in the text and should be put in brackets after the complete expression, e.g., Materials Testing (MT). Thereafter the abbreviation can be used. Appendices should be avoided, except for long formulas. Footnotes should generally be avoided in favor of explanations in the text.

3.5 Scientific names and expressions

Use scientific names according to ISO standards and according to the nomenclature of the respective scientific communities related to the field of materials science and engineering, welding and production technology etc.

3.6 Numbering of items and samples

Use a consecutive numbering of items and specimens, like Specimen 1, Sample S2, etc. Capitalize the first letter, if you talk about specific items, like >Specimen 3 was subjected to a different heat treatment<. If you talk about items in general, do not capitalize the first letter, like >...all samples were subjected to testing.....<.

3.7 Formulae and equations

Use the Word Equation Editor of Math Type to type or create equations, formulas or mathematical expressions. Equations and formulae should be typed on separate lines and numbered sequentially in parentheses flush right (1)...(n). Equations and formulae should be referred to in the text only as Equation (1), for instance, note the capital letter and the number in brackets. Do not use abbreviations of equation names. Vectors and matrices must be indicated as such. Extended roots should be written in parentheses with fraction exponents, and exponential functions should exclusively have the format exp(...). SI units should be used throughout and will only be accepted. Use $\text{mW}\cdot\text{cm}^{-3}$ instead of mW/cm^3 , for instance. Underneath an equation provide the parameters used in the respective equation by writing a separated line. Give the units in brackets to describe a parameter underneath an equation. But, do not use brackets for the value of a parameter or a unit throughout the main text, for instance write: >The material exhibits a yield strength of $\sigma_Y = 1100$ MPa<. Note the spacing between the parameter, the symbol, the value and the unit. A complete equation or formula then looks like:

$$\text{Equation} = \text{XXXXX}\cdot\text{YY}^{-1} (\text{unit}) \quad (1)$$

with σ : Stress (MPa), l: Length (mm), Abb: Parameter (unit) etc.

3.8 Tables and Figures

Tables are to be included and numbered consecutively by Arabic numbers (Table 1....n), as they appear in the text. The first word of any textual information in tables, diagrams or figures should start with a capital letter. Please capitalize only the first

letter of a noun phrase, e.g., Rotational speed (rpm), Tensile strength (MPa). A table caption should explain the symbols used in the heading and in the left-hand column. Tables should be referred to in the text as follows: Table 1: Please note the capitalized first letter. Please avoid abbreviations like Tab. Each table should be stored in a separate word file. The caption should be provided directly underneath the table in Arial 10, Bolt, single line spacing. The caption should include all information relevant to the table, i. e. should be self-explaining.

Figures are also to be numbered sequentially in the text. Related figures (e.g. a-c) should be summarized under the same number. Please, sub-divide all figures by using single brackets, i. e. by a), b) instead of (a), (b), for instance. Any other sub-dividing of figures will not be accepted, i. e. do not use sub-division like Figure 2ai or Figure 4a1 etc.

All diagrams, photos, graphs, illustrations etc. should be named as figures and should numbered consecutively as they are referred to in the text. Figures should be referred to in the text as follows: Figure 1 or Figure 2b, for instance, please note the capitalized first letter. Avoid any abbreviations like Fig. etc. and refrain from cross references. Authors are responsible that the uploaded figures in the system correspond exactly to the figures included in the text. Thus, do not use automatized referencing or numbering of figures in the main document. Authors should refrain from including figure that do not provide sufficient additional information to the text. Authors should make sure that diagrams are combined wherever possible.

The caption of the figure should be written in Arial 10, bolt, single spacing directly underneath the figure. The captions should be self-explaining.

Do not include any headings or sub-headings in the figures themselves. Such information has to be provided by the caption. Do not provide any figures or diagrams with shaded backgrounds or with frames.

Regarding the axis descriptions and any other description or legends in all figures and especially graphs, please write the units in brackets and not in square brackets, avoid any comma, slash or the word >in< between the parameter and the unit in the axis descriptions. Also, capitalize only the first letter of only the first word in the axis description and any other descriptions, as for instance: Data set number, Time t (s) or Specific energy absorption SEA ($\text{kJ}\cdot\text{kg}^{-1}$) or Force amplitude FA (N). Use only SI units and nomenclature, which means write $\text{m}\cdot\text{s}^{-1}$ instead of m/s or Density ($\text{g}\cdot\text{cm}^{-3}$),

for instance, also the unit-abbreviation for seconds is (s) and NOT (sec), Wear rate ($\text{mm}^3\cdot\text{m}^{-1}$) etc.

Line drawings and diagrams will normally be printed in a column width of 85 mm. After this reduction, all figures should have the same final letter size of at least 2 mm. The style of labelling of the coordinates must be uniform for all drawings. Dimensions should be placed on the left side at the top and on the right side at the bottom between the numbers.

For the upload in the Scholar 1 system, the following formats are recommended: TIFF, JPG, Word. PDF should be an exception. For TIFF, JPG, and MS Office or PDF files any artwork should have resolutions ≥ 1000 dpi for line artwork, ≥ 300 dpi for halftone artwork and ≥ 500 dpi for combinations of line and halftone. All image files which are submitted have to have sufficient sharpness and resolution as described above. This particularly applies to light microscopy or SEM images.

Manuscripts prepared with figures not exactly in the style as mentioned above or with figures and photos with poor resolution and/or sharpness will immediately be rejected.

3.9 Acknowledgement and Funding. These sections are not mandatory, but might be used for remarks of authors gratitude or funding.

3.10 References. Materials Testing is using the IEEE reference style with some limited differences, as explained below. Please stick exactly to the style of referencing as shown below.

In the text, all references to other publications should be numbered in the sequence as referred to in the text, starting at the beginning of the paper. For references in the text, use square brackets (e.g. Smith [1], according to recent theories [2-7, 14] etc.) In the text, references should be cited by the last name of the authors, without any abbreviations of the first name, and with the reference number in square brackets. Alternatively, the surname of the first author including the expression et al., followed by the reference number in brackets might be cited, like >Miller et al. [25] observed similar results in their study<. If you cite preceding own work or that of any co-author of your manuscript, avoid the first person singular or plural, cite the

preceding work correctly and make clear what distinguishes the present paper from preceding work and publications.

The list of references at the end of the main text is mandatory and it should be exactly formatted as shown separately below. Please use the correct spelling for all authors. Usage of the phrase et al. is not allowed in the list of references, except for references having more than five authors. Mention all authors by abbreviation of the first names and by the full surnames. Avoid any abbreviation of journal names. Include the DOI number at the end of each reference, as being available on the website shown below. Note, that manuscripts with incomplete reference lists not formatted exactly in the style as shown below, will immediately be rejected.

In the reference list, the references should be numbered as referred to in the text. Provide the full title in small letters, if this is a journal article or a paper in conference proceedings. The complete name of a journal, the title of a conference proceedings or a monography should be provided capitalized and in italics without any abbreviations, e. g. *Materials Testing*, *Practical Metallography* etc.

Do not use any >and< between the author's names.

References of journal articles should include the DOI-Number (digital object identifier). On www.crossref.org/SimpleTextQuery, you are able to check whether DOI-numbers are available for your references or not.

Please, note again that manuscripts submitted with references lists not fitting exactly to this format, will not even be considered for pre-screening. Thus, the reference list should be prepared by following exactly the examples below:

Journal articles with page numbers [1], article numbers [2], e-published ahead of print [3] or forthcoming/in press [4]:

[1] A. Author, B. Surname, Title of the paper, *Materials Testing*, vol. 60, no. 1, pp. 123 – 456, 2018, DOI: xxxxx.

[2] A. Author, B. Surname, Title of the paper, *Materials Testing*, vol. 60, no. 2, Feb. 2018, Art no. 12345, DOI: xxxxx.

[3] A. Author, B. Surname, Title of the paper, *Materials Testing*, March 2018, DOI: xxxxx.

Books and monographs:

[5] A. Author, B. Surname, C. Anotherone, *Testing of Mechanical Properties*, 2nd ed., De Gruyter, Berlin, Germany, 2000.

[6] A. Author, B. Surname, C. Anotherone, *Testing of Mechanical Properties*, 2nd ed., De Gruyter, Berlin, Germany, 2000.

[7] A. Author, B. Surname, Mechanical properties of materials, in *Recent Advancements in Materials Testing*, C. Editor, D. Alsoeditor, Eds., De Gruyter, Berlin, Germany, 2000, pp. 123 – 456.

[8] A. Author, B. Surname, Mechanical properties of materials, in *Recent Advancements in Materials Testing*, vol. 5, C. Editor, D. Alsoeditor, Eds., De Gruyter, Berlin, Germany, 2000, pp. 123 – 456.

Proceedings or conference papers:

[9] A. Author, B. Surname, Mechanical properties of materials, in *2000 Materials Testing Conference*, Proc. of MTC, Berlin, Germany, De Gruyter, 2001, pp. 123-456.

Electronic publications:

[10] A. Author, B. Surname, Title of the paper, *Materials Testing*, vol. 60, no. 1, pp. 123-456, 2018 [Online]. Available at: <http://xyz>. DOI: xxxxx

[11] A. Editor, B. Elseeditor, Eds., *Materials Evaluation*, Berlin, Germany, De Gruyter, 2005 [Online]. Available at: <http://xxxxx> [accessed: Feb. 01, 2010].

Theses and dissertations

[12] A. B. Author, The impact of materials testing, Ph.D. dissertation, Department of Materials Engineering, University, City, Country 2000.

Reports:

[13] A. Author, B. Surname, C. Anotherone, Over the top of materials evaluation, Company, City, Country, Technical Report No. 123, Nov. 2002.

Patents:

[14] A. B. Author, New testing machine, Country-Patent Number, Country, July 1, 2001.

Standards:

[15] *Tensile Testing – Part 1*, ISO Standard No., May 2000 [Online]. Available: <http://xxxxx>.

3.11 The authors of this contribution. This section is mandatory and should include for each author the complete academic title, year of birth, studies and finals, professional experience and the present position in the enterprise/institute as well as the respective location. This section has to be written for all authors in full sentences (four or five lines). Please, refrain from submitting any tabular CVs.

4. Corrections and revisions

Every publication of a paper in *Materials Testing* includes a single blind reviewing process.

After finishing the reviewing process, the corresponding author will receive the reviewed and already edited main manuscript as MS-word file, for correction and revision according to the attached and completed review form. Please, refer only to these two files while preparing your review, i. e. to the main manuscript and the review form.

Changes by the authors during the revision process can only be made in the already edited MS-word file of the main manuscript. Changes in the text have to be clearly marked in blue color. Any changes by the authors made in the text using any alteration mode of MS-Word will not be accepted.

Changes in tables and figures should only be made in black and white.

Please follow strictly the amendments in the review form.

The amendments are categorized as:

Major amendments: These can, if not considered appropriately during revision cause rejection of the paper

Minor amendments: These should be considered

Mandatory amendments: These have to be considered by the authors

Optional amendments: These are suggestions to improve the paper and authors can choose to follow them.

Fulfilment of the amendments and larger changes have to be commented by the authors in the *Review Form* attached to the manuscript. Please avoid making comments to amendments via email, in the text or as additional files and letters.

Generally, authors will be given a deadline of only max. seven days for the revision of the paper according to the amendments. Authors should keep to this deadline, in order not to retard the publication process. Extensions may only be granted upon formal request by the corresponding author. If authors do not respond within the given deadline, the paper will immediately be taken out of the publication process until the author has responded. If no response is received after reminder, the authors risk that the paper will be completely dropped.

Changes of figures have also to be made in the separate files and the changed figures have to be uploaded as well. Authors are responsible to check and confirm that the changes in the figures incorporated in the main manuscript are identical to those in the separately uploaded files.

Depending on the decision of the editor and publisher, properly revised manuscripts will be forwarded finally to publication. No further changes are allowed at this point!

The corresponding author can monitor the publication status of the manuscript at any time and thus, any further requests at the EiC or the publication office at De Gruyter will not be answered. Authors have to wait until the lay-outed article with all figures and tables will then be sent to the corresponding author again for a final proof. Authors should check the proof carefully for possible mistakes that occurred in the lay-outing and proofreading processes. Minor corrections together with the permission to print have to be sent back by the authors within three working days. At this proof stage, corrections are restricted to typesetting and other errors. No major changes or additions to the edited manuscript can be accepted. If you do not respond to the proofreading and permission to print request within three days, you risk that publication of the whole article is delayed.