

Style guide for authors – Int. J. Mater. Res.

This style guide is designed to speed up the publication of your paper. *What we need from you, the authors, is a document that we can review and edit easily.* Please do not try to copy the final journal published lay-out. Follow these guidelines carefully in order to save yourself subsequent time-consuming corrections after your paper has been reviewed and edited. It is the authors' responsibility to ensure their paper is in the "journal style" before it can finally be accepted for publication. This guide describes first the IJMR structure and then the style to be used in your paper (it is **not** intended for use as a template).

If you have any questions about how to prepare or submit your paper to IJMR, please e-mail the editorial office at ijmr@is.mpg.de

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Paper structure

Important: In general, manuscripts should be no longer than about 6500 words, or roughly 16 A4 pages of 1.5 line spaced text. For more details, please see “Length”, p. 6.

The first page (remember to use **page numbers**) should contain author names, affiliations, paper title, abstract and keywords only. Author names should be given using full first (given) and last (family) names of all authors. Use a comma not “and” before the final author. Do NOT indicate the corresponding author here; there is a separate section after the reference list for the correspondence address. Institutional affiliations should include simply the name, town and country, not a full postal address:

Zumin Wang^a, Arman Bahrami^a, Arindam Banerjee^b, John B. Smith^b (include full first name)

^a Department, Institution, Town, Country (no street names & numbers or postcodes)

^b Department, Institution, Town, Country (no street names & numbers or postcodes)

(where TWO OR MORE affiliations are given use lower case letters a, b, c etc. for affiliation superscripts; where all authors have the same affiliation, no superscript is needed).

Title in bold font with words in lower case (only first letter of first word capitalised)

Avoid excessively long titles. The title is followed immediately by the abstract *without* the heading “Abstract”. It should contain the primary objectives, the research design, methods and procedures, experimental interventions, main outcomes and results as well as conclusions. No abbreviations are allowed in the abstract; introduce them in the main text. The abstract should not be longer than 10 lines.

Keywords: Keyword1; Keyword2; Keyword3; Keyword4; Keyword5

(Maximum of 5; Only first letter capitalised; Not italic; Separated by semicolons and spaces)

The main text should start on page 2 and broadly follow the numbered headings of the outline structure below. If considered appropriate, the “Results” and “Discussion” sections can be combined, authors should determine the best way to present their work in this style.

1. Introduction

The introduction should contain the motivation for the study of the presented research work, including relevant background literature review.

2. Experimental procedure

This section should be written such that a reader can reproduce the experiments performed by the authors on the basis of the written text. Often this section is given far too little attention in manuscripts. Similarly, methods used for evaluation of measured data, if not dealt with in other sections of the manuscript, should be described here in considerable detail. Use the simple past tense, e.g. “Three specimens were prepared using...” For equipment and materials used in the work, the make/type, manufacturer/supplier and country of origin should be specified.

3. Results

This section should only contain results without discussion.

4. Discussion

The results presented in Section 3 should be interpreted here taking into account the relevant literature in the research area.

5. Conclusions

Finally, the main results should be summarised here and key conclusions drawn from them.

The heading “Acknowledgements” is not used, simply include a short paragraph acknowledging help, support, contributory work, relevant funding etc.

References:

Please use the IJMR style, paying close attention to the structure for each type of publication. Note that square brackets are used for reference numbers. Please ensure that you use the correct abbreviations for journal titles, include DOIs, include all authors (do not use “et al.” in the reference list) with names separated by commas not “and”, with the last author followed by a colon, and that, where relevant, all editors are named. Do not include paper titles.

For correct journal abbreviations search with, e.g:

<http://woodward.library.ubc.ca/research-help/journal-abbreviations/>

<http://library.caltech.edu/reference/abbreviations/>

Important: The reference list must include DOI (digital object identifier) numbers for all publications that have them. It is a submission requirement that DOIs are included in the reference list. For more information, see <http://www.doi.org/> and to look up DOIs go to, e.g. <http://www.crossref.org/guestquery/>

Journals:

[1] F. Mücklich, A. Lasagni, C. Daniel: Int. J. Mater. Res. 97 (2006) 1337.

DOI: 10.3139/146.101375

[2] B.W. Wang, Z.D. Zhang, S.L. Tang, X.G. Zhao, X.M. Jin: J. Alloys Compd. 245 (1996) 153. DOI: 10.1016/S0925-8388(96)02498-X

Books:

[3] U. Dehlinger: Theoretische Metallkunde, Springer-Verlag, Berlin (1968).

Books or proceedings with an editor or editors:

[4] R. Wagner, R. Kampmann, in: R.W. Cahn, P. Haasen, E.J. Kramer (Eds.), Materials Science and Technology, Vol. 5, VCH, Weinheim (1991) 213.

DOI: 10.1002/adma.19910031214

[5] G. Ferrari, G. Artioli, M. Parisatto, in: C.B. Lake, C.D. Hills (Eds.), Proc. Int. Solidification/Stabilization Techn. Forum, Dalhousie University, Canada (2010) 193.

Internet resources:

[6] <http://www.xxx.com>

Academic theses (PhD, MSc etc.):

[7] J. Smith: PhD thesis, Modelling of fatigue behaviour of Ni-based superalloys, Cambridge University, UK (2008).

Patents:

[8] National Starch and Chemical Corp. *Degradation of granular starch*. US Patent: us 4838944 (1989).

Please pay close attention to the use of **punctuation** and **spaces** in the layout of references.

In Brief

Use IJMR reference style

Give names of ALL authors

Give DOIs for all publications that have them

Correspondence address: You should provide the full academic title and name of the corresponding author, along with the full postal address and other contact details. For example:

Dr Richard Segar
Max Planck Institute for Intelligent Systems
Heisenbergstrasse 3,
70569 Stuttgart
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Tel: +49 (0)711 689 3474
e-mail: segar@is.mpg.de
Web: www.degruyter.com/journal/key/IJMR/html

List of figure and table captions. (starting on a new page)

Important: Captions should only appear in a dedicated list at the end of the manuscript. They should not be included in the main text and should not be included with the figures, which must be uploaded to [Editorial Manager®](#) in separate dedicated image files (see also Section 8 Figures etc in “Paper Style”)

Figure 1: When using more than one image per figure, label them (a), (b), (c), (d) etc. and use the letters with full round brackets in the caption before the description of the relevant image.

Figure 2: Captions should point out the important features of the figure, allowing the reader to understand fully what is being illustrated. “SEM micrograph of the microstructure” is not enough!

Table 1: Table captions should describe the contents and explain their relevance to the work.

Paper style.

1. Text

Please use 12 point font, single column full-width text, 1.5 or double spaced lines, 2.5 cm margins and numbered pages (as this page is laid out); at the submission stage reviewers and editors need papers to be easy to read and annotate. Headers and footers are not necessary. Acceptable manuscript file formats are MS Word and LaTeX, but *not* PDF.

2. Length

Papers should be concise and clear; excessive length does not help with this and may even deter readers. IJMR does not have a page charge; however, manuscripts should in general be no longer than about 6500 words, with a maximum of around 8 figures. A manuscript longer than 25 double-spaced typescript pages may be returned by the editor to the authors, without it having been refereed, with the remark that it must be shortened before being reconsidered. Your paper only needs to be long enough to explain your work clearly; padding it out with less relevant detail will simply reduce its quality.

Short Communications

IJMR also welcomes what we term “Short Communications” for publishing interesting results quickly, without the need for writing a full paper. These should be no longer than 2 journal pages (around 1000 to 1500 words), with a maximum of 2 or 3 figures and no more than 10 to 15 references. Authors should still follow this style guide in preparing short communications.

3. Section headings

Main headings should be in bold with only the first initial letter capitalised, sub-headings should not be in bold or italic. Starting with the **Introduction** all sections should be numbered in the style **1. 2. 3.** 3.1. 3.2. 3.2.1. etc. Always finish with a full stop and when reaching a third sublevel (e.g. below 3.2.1.) use text subheadings only (i.e. un-numbered) for further sublevels.

4. Language

The publication language of the journal is ENGLISH. Remember that many readers of your paper will not be native speakers of English, so consistency and clarity are important. We recommend either British or US English, but please be consistent with spelling, e.g:

British	US
ageing	aging
aluminium	aluminum
analyse	analyze
centre	center
characterise	characterize
gauge	gage
grey	gray
modelled	modeled
nano/micro/millimetre	nano/micro/millimeter
sulphur	sulfur
vapour	vapor

(N.B. whilst the -ise / -ize word-ending spelling is optional in UK English, -ise is preferred for reasons of distinction.) Authors using Word can set the “set language” facility to the desired language version and so solve most problems.

There are many websites detailing spelling differences, grammar, usage etc. such as:
http://en.wikipedia.org/wiki/American_and_British_English_spelling_differences

5. Abbreviations

Abbreviations should **not be used in the abstract**. If abbreviations are to be used in the main text, then introduce them at the first use of the full expression and from then on use only the abbreviation, e.g. scanning electron microscopy (SEM); subsequently always use SEM. All abbreviations must be defined at first use to avoid any possibility of ambiguity. Whilst most abbreviations use upper case letters those for structures such as fcc, hcp etc. should be lower case and as with other abbreviations, no full stops between letters.

6. Italics, bold and capital letters

Italicisation should be used sparingly in the text, if at all, and only then for *special emphasis* if this cannot be suitably achieved with words. Short Latin phrases (in situ, et al. etc.) should not be italic, but longer words and phrases, e.g. medical or biological terms, should be.

Brackets, mathematical symbols (including integral signs, differential d , partial differential ∂ , Δ , etc.) and abbreviations such as L for liquid or c for critical should not be italic. Symbols with a value should be italic, e.g. π , σ (stress), θ (XRD Bragg angle), E (Young's modulus), pH (acidity/alkalinity), T (temperature) etc. Subscripts and superscripts used to qualify symbols follow the same rules, e.g. T_m for melting temperature and σ_x for stress in the x -direction (see also Section 10. Formulae). If a character needs to be italic it should be italic whenever it is used, whether in equations, text, figures or tables. Bold text should be reserved for main section headings, vectors and tensors. Capital letters should be used for proper names, e.g. Young's modulus, but not for process or technique names, e.g. scanning electron microscopy *not* Scanning Electron Microscopy (use capitals only in the abbreviation: SEM).

7. Hyphens and dashes

When connecting words use a hyphen if the first word qualifies the second, but use a longer dash if the words are simply being linked, e.g. stress-induced transformation (hyphen), stress–strain curve (this symbol is called an “en dash” and should be used wherever a long dash is required); specific compositions use a hyphen, e.g. Hf-12Si (wt.%), whilst general systems use a dash, e.g. Hf–Si phase diagram. Quantity ranges and terms involving two different names should use an en dash, e.g. 600–750 K, Hall–Petch equation.

8. Figures and tables, and how to refer to them

Position

Figures should be uploaded in separate files and should appear at the end of your manuscript when you approve it for submission in [Editorial Manager®](#). Figures and tables should **not** be placed in the main text (see “File Format” below). Final positioning of figures is determined by the typesetters, but they try as far as possible to match the position with the relevant text.

Colour

Colour figures will be published online in colour without charge; however, there are charges for colour **print** publication. Further details are available in the author instructions (available [here](#)) and in the print release form sent with the galley proof of the paper.

Important: If you do not want colour **print** reproduction of figures then you must ensure that your figures are clear and convey all the necessary information for understanding what is being illustrated when reproduced as greyscale images.

Image file format

We recommend the following dedicated image formats: TIFF, EPS, if necessary high quality JPG, GIF, PNG etc. (images **cannot** be accepted as PDF or MS Office - .doc, .xls, .ppt etc. - files). All image files should be uploaded individually with the figure number in the file name, not in a single document. Figure captions should not be included with figures but listed separately on a new page at the end of the manuscript file. Resolution should be at least 1020 pixels in width for images fitting one column (85 mm wide); images needing more space should have a proportionately higher number of pixels.

Important: When including graphs, make an image of the final graph instead of using files containing all the original data, as these are unnecessarily large. Authors are responsible for ensuring a sufficiently high resolution of images for print reproduction of figures whilst maintaining a reasonable file size (remember that these images are going onto part of an A4 journal page not a large poster).

Content

SEM and TEM micrographs should have the automatic instrument data removed and a clear plain scale bar added in a reasonably large font size. There should be always a space between number and unit. Light optical micrographs should also have scale bars added; do not use magnification factors as these will be rendered incorrect if the image size is changed for publication.

A normal, unenhanced font should be used for figure and axis labels; symbols on graphs should be italic where appropriate (see Section 6) and units on axis labels should be in round brackets, e.g. Stress, σ (MPa).

Remember always to use decimal points, not commas, for fractions in axis labels.

Referencing in the main text

When referring to particular tables and specific sections of the paper always use the full word with a capital letter: Table 1 or Section 2.2. (Tab. and Sect. should not be used).

When referring to particular figures, references or equations at the **start** of a sentence use the capitalised full words: Figure 3, Reference [4] or Equation (5). Elsewhere in the sentence use the abbreviations Fig. 3, Ref. [4] or Eq. (5). A figure with more than one image should be referred to as Figure 6a and b or Fig. 7a–d as appropriate and without brackets for the letters;

for references to multiple figures use Figures 2 and 3 or Figs. 5–8 etc. Equations follow the same style but remember always to use round brackets for the numbers.

9. References cited in the text, figures and tables (see also Section 8. Figures)

All references should be cited in numerical sequence in the main text (citations in tables, figures or captions must be given in the main text as well), using the following structure:

- i. Sole author: use last name and Ref. number (using square brackets), e.g. Smith [1] found that...
- ii. Two authors: both last names and Ref. number, e.g. Smith and Jones [2] showed that...
- iii. More than two authors: first author last name plus et al. and Ref. number, e.g. Smith et al. [3] calculated... (don't forget that the "al." is an abbreviation (of alii) and so needs a full stop).
- iv. Sequences of *three or more* references should be separated by an "en dash", e.g. Refs. [1–6]. (*Don't* list every Ref. number in a sequence).
- v. Two consecutive references and multiple non-consecutive reference numbers should be separated by a comma and a space, e.g. [12, 13] or [1, 6, 13], always in numerical order.

10. Formulae, equations and symbols

Formulae should be written on separate lines and be numbered in round brackets:

$$y = f(x) \tag{1}$$

Refer to the equations as Eq. (1) etc. (see also Section 8. Figures). If equations are used in the text use a/b instead of $\frac{a}{b}$.

Please do not use punctuation around numbered equations as, whilst technically grammatically correct, if the equation appears in the middle of a sentence punctuation symbols can cause confusion. When using an equation editor please ensure that symbol sizes and fonts are consistent throughout the paper. Always use spaces around symbols such as +, −, = etc. in equations.

All terms must be defined at first use, whether in the text or in an equation. If your work contains a significant number of different symbols you might consider compiling a glossary of terms to simplify the explanations. Use italics for all symbols with values (variable or constant), but not for descriptive symbols (e.g. l for liquid, cr for critical, m for melting etc.) see also Section 6. Crystallographic space groups should not use italics; vectors should be in ***bold italic*** type or just *italic* with an arrow over the top.

Always use a proper minus sign (−), not a hyphen (-) including for indices, and use a proper multiplication sign (×), not the letter x.

11. Units and numbers

SI units should be used throughout unless a non-SI unit is commonly accepted in that particular field or is clearer, e.g. temperatures can be in °C (always use a proper degree sign *not* a superscripted o or 0), but heating/cooling rates and temperature differences are always in K (remember that 10 °C s⁻¹ is 10 K s⁻¹ *not* 283 K s⁻¹ !). Use J m⁻² *not* J/m² and use a space or “middle dot” between units, i.e. J m⁻² or J·m⁻². Always use a space between the number and the unit, e.g. 5 %, 600 K, 27 m s⁻¹, 100 °C etc. The only exception is for angle degrees, e.g. $\alpha = 45^\circ$

Compositions expressed as percentages should clearly indicate the basis used, i.e. at.%, wt.%, mol.% or vol.%. Note the separation by full stop only; spaces are used to separate the composition, e.g. 5 wt.% Ni.

Make sure that decimal fractions use a decimal point not a comma, i.e. 3.1415 not 3,1415.

Powers of 10 should be indicated by 10^x not 1 E x; thousands should be separated by a thin, no-break space, not a comma: 100 000.

12. Footnotes

Authors may use footnotes in order to add a necessary explanation, description etc. where leaving it in the text would disrupt the flow of the paper. However, footnotes should be used sparingly and authors should consider carefully whether the information should actually appear in the main text or even not at all.

Additional information

Nominating reviewers

The author(s) should provide the names and **correct** e-mail addresses of three possible reviewers who must be **experts on the topic of the paper**. It is not necessary for the authors to know the proposed reviewers. Only one of these three proposed referees may have an affiliation in the same country and/or the same nationality as holds for the authors.