

Extended Authors' Instructions

Instructions and Tips on Preparing and Submitting a Manuscript to the Journal of Radioanalytical and Nuclear Chemistry

Note: This document contains the instructions found on the journal's webpage (<http://www.springer.com/chemistry/journal/10967>) and also the instructions and recommendations by the editorial board of the journal

1 BEFORE WRITING

Literature

Examine carefully the latest literature in the field, check for your keywords in the major journals of the topic, and refer as well as discuss these articles with respect to your methods, statements and conclusions. Emphasize the novelty of your work compared to other similar research.

Simulations

Simulations do not replace experiments, but they help to understand significant processes of a planned experiment or to find the proper experimental setup. Reproducing any widely used arrangements, or commonly known phenomena with simulations will not be of the interest to the scientific community. On the other hand, simulating any unusual setups or materials in experiments does not replace the deep scientific understanding of interactions built-in the simulation code. Results of simulations must also be thoroughly interpreted.

Methods and software

Any methods (calculations, software or techniques) used in your work, must not be regarded as black boxes; their operation and effect on the results should be interpreted. Do not describe the use and the operation of software, instead the methods programmed in it.

2 PREPARING THE MANUSCRIPT

2.1 ORGANIZATION

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, telephone and fax numbers of the corresponding author

Title

The title should be specific and informative. Any subtitle, if absolutely necessary, must follow the main title with a dash. Avoid acronyms or complete sentences.

Abstract

Please provide an abstract of 50 to 100 words. The abstract should briefly describe the objectives of the research, the principal results, and the major conclusions. You should give a special emphasis to the novelty of your research. The abstract should not contain any undefined abbreviations or unspecified references.

- Avoid details
- Avoid introductory remarks (*e.g.* the investigated method has been used for many decades successfully...)

Keywords

Please provide 4 to 6 keywords which can be used for indexing purposes.

Keywords are very important; it helps not only the reader to decide if the paper meets his interest but also the editors to choose the proper reviewer. Here, you should list the names of the most important materials and methods you used or the phenomenon you investigated.

- Do not use too general phrases (like radiation or isotope), but you should not be too specific either (such as environmental radioactivity of polluted soil is too specific).

Introduction

The paper should start with an introduction. You should introduce the subject, summarize the fundamentals necessary to understand the paper, and define the problem. Discuss the latest publications in the same field and don't forget to cite them. The Introduction is not an extended version of the Abstract; do not use the same sentences in both places.

Further sections of the manuscript can be Theory, if needed, Experimental, Results and Discussion, and Conclusions. Your topic may require different sections (*e.g.* methods describing calculations or simulations). A **Review paper** certainly needs other sections: Abstract, Introduction, the reviewed topics one by one, and a conclusion. In the case of a review paper, it is even more important to give reference to the latest papers appearing in the major journals of the field.

Theory

In this section, the summary of the theoretical basis should be given. Here, you can cite handbooks or classical papers in your field, and use equations.

Experimental

Describe your experiments so that they could be reproduced by another researcher. Do not describe in detail the methods commonly used or already published, cite them instead. Emphasize the critical steps.

Results and Discussion

Here, your results and their interpretation should be given. It can be two separate sections if appropriate. Use informative tables and figures and always discuss them thoroughly in the text.

Do not use too many figures or tables. Do not present the same data in both a table and a plot. Always describe and refer to them in the text. If you want to show all the spectra you measured, put them in the supplementary material. The figures should be not just informative but also esthetic and comprehensive. Avoid straight-line plots or graphs that can be described

with a simple sentence (*e.g.* the signal was found to be proportional to the mass, or the measured quantity did not change in time).

Conclusions

This section is the most important one. It should not repeat sentences from the Abstract, Introduction, and the Results sections. It should summarize the most important results, their novelty and advantages. You may also mention here your future plans.

The paper ends with **Acknowledgements**, if needed, and **References**, see below.

Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section before the reference list. The names of funding organizations should be written in full.

2.2 STYLE AND FORMATTING

Text

The papers must be written in English. You can write your text either in British or in American English, but be consequent. It is the responsibility of the author to use a correct language. Non-native speakers are recommended to ask the help of a colleague who is familiar with scientific writing in English, preferably a native speaker.

You should write for the colleagues working in similar fields. Do not describe methods or phenomena that are supposed to be of common knowledge in the field. Avoid repetitions.

- Be consequent in using tense (*e.g.* past tense or present perfect tense), person, active or passive forms.
- Compound adjectives are written with hyphens, *e.g.*:
 - A high-energy photon means a photon with a high energy
 - A 5-cm crystal means a crystal with a length of 5 cm.
 - A low-background counting facility gives a low background count.
- Adverbs and adverbial expressions at the beginning of the sentences are followed by a comma. *E.g.*:
 - First, the detector was calibrated.
 - Consequently, the measurement had to be repeated.
 - During the first experiment, the temperature was kept constant.

Text Formatting

Manuscripts should be submitted in Word.

- Use a normal, plain font (*e.g.*, 10-point Times Roman) for text.
- Use italics for emphasis.
- Use the automatic page numbering function to number the pages.
- Do not use field functions.
- Use tab stops or other commands for indents, not the space bar.
- Use the table function, not spreadsheets, to make tables.

- Use the equation editor or MathType for equations.
- Save your file in docx format (Word 2007 or higher) or doc format (Word 2003).

Manuscripts with mathematical content can also be submitted in LaTeX.

LaTeX macro package (zip, 182 kB):

<http://static.springer.com/sgw/documents/468198/application/zip/LaTeX.zip>

Headings

Please use no more than three levels of displayed headings.

Abbreviations

Abbreviations should be defined when mentioned for the first time in the paper and used consistently thereafter.

Equations, Mathematical Expressions and Physical Quantities

- For equations, use the equation editor or MathType.
- Number the equations consecutively.
- The equations should be placed centered, while their serial numbers should be given after them in parentheses aligned to the right.
- Refer to them in the text as Eq. (1) etc.
- For in-line equations, or just one symbol, you can also use equation editors, or just type them as texts, following a few simple rules:
 - Letters (including Greek letters) meaning numbers and the symbols of physical quantities are typed in italic (ε , T)
 - Vectors (rarely used in these texts) are printed in bold (\mathbf{v})
 - Letters denoting names, chemical symbols are written normally (like Avogadro constant: N_A , or k_{Au})
 - Numbers are always normal even in indices (k_0)
 - Function names are typed with normal fonts (e.g. $\sin 2x$)
 - Operation signs are separated with spaces (use the “hard space”), like: $x + 2 = 5$. Multiplication sign should be avoided in formulae ($a = bc$). When it needs to be emphasized, use \times or \cdot , but never x or X .
 - Minus sign is written directly in front of the number, use Ctrl + ‘-’, instead of just ‘-’ (hyphen).
- All physical quantities, especially the experimentally determined ones, have to be given with uncertainties, together with the proper units.
- Units follow the numbers after a space (use hard space: Ctrl+Space) and are written with normal font. Separate the basic units with spaces (use hard space: Ctrl+Space). Division is to be avoided in units, use negative powers instead. E.g. 1 cm, 19.1 g cm⁻³, 9.81 × 10⁻² kg m s⁻². SI units (base or derived) are preferred. Accepted units (min, hour, ° (degree), liter (l or L), eV) and certain commonly used units (bar, barn (b), Å (angstrom)) can be accepted. (You can find very useful summaries on the use of SI units even on Wikipedia.)
- Use decimal points, not decimal commas. (Check your regional settings).
- When writing physical quantities with uncertainties, use just the significant number of digits, e.g.
 - 99 ± 3%, not 99.21 ± 2.89%, or 100 ± 1.123
 - 10 600 ± 400, not 10 592 ± 356

- You can also put the absolute uncertainty in parentheses showing the last or last two digits, e.g. 10.1(15) meaning 10.1 ± 1.5 . According to our convention, the numbers in the parentheses can be one of the following: one-digit numbers from 3 to 9, two-digit numbers from 10 to 25, e.g. 568(3) instead of 568.2(28), 34.0(10) instead of 34(1) etc.
- For large and small numbers, use the powers of ten: $3.26(3) \times 10^{-5}$. In tables it can be abbreviated using “E”: 3.26(3)E-5

Note the following:

- Names of chemical element and of simple compounds are written in lower case without hyphens: e.g. uranium, sodium chloride; follow the IUPAC nomenclature.
- For organic compounds, use their common names, when possible. Check the IUPAC nomenclature.
- Isotopes of chemical elements can be written as in the example: ^{60}Co or Co-60
- Oxidation states appear in parentheses written with Roman numbers: U(VI) or uranium(VI).

Footnotes

Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.

Footnotes to the text are numbered consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data).

Footnotes to the title or the authors of the article are not given reference symbols.

Always use footnotes instead of endnotes.

2.3 REFERENCES

Citation

Reference citations in the text should be identified by numbers in square brackets. Some examples:

1. Negotiation research spans many disciplines [3].
2. This result was later contradicted by Becker and Seligman [5].
3. This effect has been widely studied [1-3, 7].
4. The details are given in Ref. [9].

Reference list

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes or endnotes as a substitute for a reference list.

The entries in the list should be numbered consecutively.

- Journal article
Nugen S, Baeumner HJ (2008) Trends and opportunities in food pathogen detection. *Anal Bioanal Chem* 391:451-454
or
Nugen S, Baeumner HJ (2008) *Anal Bioanal Chem* 391:451-454
- Article by DOI

Slifka MK, Whitton JL (2000) Clinical implications of dysregulated cytokine production. *J Mol Med*. Doi:10.1007/s001090000086

- Book
South J, Blass B (2001) *The future of modern genomics*. Blackwell, London
- Book chapter
Brown B, Aaron M (2001) In: Smith J (ed) *The rise of modern genomics*, 3rd edn. Wiley, New York
- Online document
Healthwise Knowledgebase (1998) *US Pharmacopeia*, Rockville.
<http://www.healthwise.org> . Accessed 21 Sept 1998

Always use the standard abbreviation of a journal's name according to the ISSN List of Title Word Abbreviations, see www.issn.org/2-22661-LTWA-online.php . For authors using EndNote, Springer provides an output style that supports the formatting of in-text citations and reference list. EndNote style (zip, 2 kB):

<http://static.springer.com/sfw/documents/943237/application/zip/SpringerBasicNumber.zip>

2.4 TABLES

- All tables are to be numbered using Arabic numerals.
- Tables should always be cited in text in consecutive numerical order.
- Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.
- Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.
- Format the tables in the simplest way using the table function of MS Word. The tables should be included at their intended positions in the text.

Table Captions

- Each table should have a concise caption describing accurately its content.
- Table captions begin with the term **Table** in bold type, followed by the table number, also in bold type. No punctuation is needed after either the number or the end of the caption. e.g.: **Table 1** Title
- Table should have minimum number of columns and rows. Large empty fields should be avoided in tables.
- Print numbers with significant digits (see Equations, Mathematical Expressions above). Do not copy the numbers from Excel without formatting!

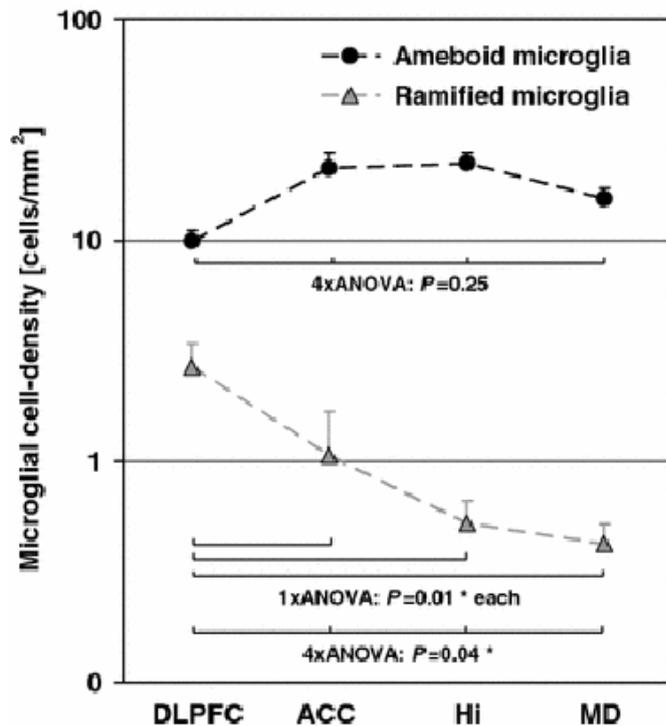
2.5 FIGURES

Electronic Figure Submission

- Supply all figures electronically.
- Indicate what graphics program was used to create the artwork.
- For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. MS Office files are also acceptable.
- Vector graphics containing fonts must have the fonts embedded in the files. MS Office figures are also acceptable.
- Include the graphs at their intended locations.

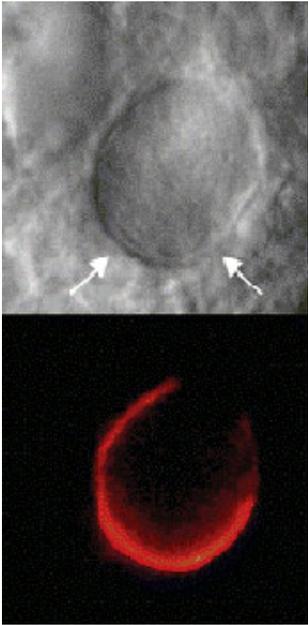
- Figures, not prepared in MS Office should be uploaded as separate picture files. Take care of their resolutions (line graphs: 1000dpi, pictures with fine shades, like photographs at least 300dpi, color diagrams at least 600 dpi, see the details below). Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.
- Note that the final positions of the figures and the tables are decided by the typesetter

Line Art



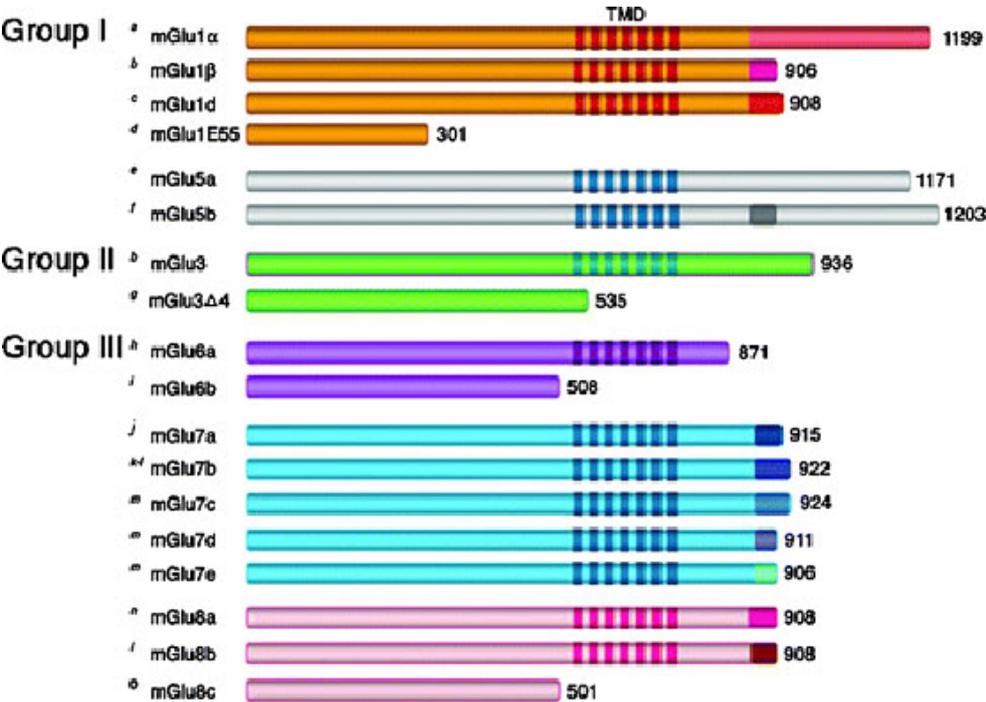
- Definition: Black and white graphic with no shading.
- Line drawings and line drawings in bitmap format should have a minimum resolution of 1000 dpi, or use vector graphics.
- Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
- All lines should be at least 0.1 mm (0.3 pt) wide.
- In X-Y plots, always name the axes, also give the units in parentheses.
- As mentioned earlier, avoid figures containing just a linear or a constant function.
- Set the colors of the original graph so that they can be differentiated between when formatted to black-and-white figure, too. Don't use the default colors of Excel. For line plots, always use white background and vivid colors (like red, blue, or green).
- If you have more than three functions in the plot, also use patterns.
- For measured data, use markers and error bars.
- Use vector graphics when possible. Vector graphics containing fonts must have the fonts embedded in the files.

Halftone Art



- Definition: Photographs, drawings, or paintings with fine shading, etc.
- Halftones should have a minimum resolution of 300 dpi.
- If any magnification is used in the photographs, indicate this by using scale bars within the figures themselves.

Combination Art



- Definition: a combination of halftone and line art, e.g., halftones containing line drawing, extensive lettering, color diagrams etc.
- Combination artwork should have a minimum resolution of 600 dpi.

Color Art

- Color art is free of charge for online publication.
- If black and white will be shown in the print version, make sure that the main information will still be visible.
 - A simple way to check this is to make a xerographic copy to see if the necessary distinctions between the different colors are still apparent.
- If the figures will be printed in black and white, do not refer to color in the captions.
- Color illustrations should be submitted as RGB (8 bits per channel).

Figure Lettering

- To add lettering, it is best to use Helvetica or Arial (sans serif fonts).
- Keep lettering consistently sized throughout your final-sized artwork, usually about 2–3 mm (8–12 pt).
- Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.
- Avoid effects such as shading, outline letters, etc.
- Do not include titles or captions within your illustrations.

Figure Numbering

- All figures are to be numbered using Arabic numerals.
- Figures should always be cited in text in consecutive numerical order.
- Figure parts should be denoted by lowercase letters (a, b, c, etc.).
- If an appendix appears in your article and it contains one or more figures, continue the consecutive numbering of the main text. Do not number the appendix figures, "A1, A2, A3, etc." Figures in online appendices (Electronic Supplementary Material) should, however, be numbered separately.

Figure Captions

- Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, not in the figure file.
- Figure captions begin with the term Fig. in bold type, followed by the figure number, also in bold type such as **Fig 1**.
- No punctuation is to be included after the number, nor is any punctuation to be placed at the end of the caption.
- Identify all elements found in the figure in the figure caption; and use boxes, circles, etc., as coordinate points in graphs.
- Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

Figure Placement and Size

- When preparing your figures, size figures to fit in the column width.
- For JRNC the figures should be 39 mm, 84 mm, 129 mm, or 174 mm wide and not higher than 234 mm.

Permissions

If you include figures that have already been published elsewhere, you must obtain permission from the copyright owner(s) for both the print and online format. Please be aware that some publishers do not grant electronic rights for free and that Springer will not be able to refund any costs that may have occurred to receive these permissions. In such cases, material from other sources should be used.

Accessibility

- See http://www.springer.com/chemistry/journal/10967?detailsPage=pltc_i_2078107

2.6 ELECTRONIC SUPPLEMENTARY MATERIAL

Springer accepts electronic multimedia files (animations, movies, audio, etc.) and other supplementary files to be published online along with an article or a book chapter. This feature can add dimension to the author's article, as certain information cannot be printed or is more convenient in electronic form.

Submission

- Supply all supplementary material in standard file formats.
- Please include in each file the following information: article title, journal name, author names; affiliation and e-mail address of the corresponding author.
- To accommodate user downloads, please keep in mind that larger-sized files may require very long download times and that some users may experience other problems during downloading.

Audio, Video, and Animations

- Always use MPEG-1 (.mpg) format.

Text and Presentations

- Submit your material in PDF format; .doc or .ppt files are not suitable for long-term viability.
- A collection of figures may also be combined in a PDF file.

Spreadsheets

- Spreadsheets should be converted to PDF if no interaction with the data is intended.
- If the readers should be encouraged to make their own calculations, spreadsheets should be submitted as .xls files (MS Excel).

Specialized Formats

- Specialized format such as .pdb (chemical), .wrl (VRML), .nb (Mathematica notebook), and .tex can also be supplied.

Collecting Multiple Files

- It is possible to collect multiple files in a .zip or .gz file.

Numbering

- If supplying any supplementary material, the text must make specific mention of the material as a citation, similar to that of figures and tables.
- Refer to the supplementary files as “Online Resource”, e.g., "... as shown in the animation (Online Resource 3)", "... additional data are given in Online Resource 4”.
- Name the files consecutively, e.g. “ESM_3.mpg”, “ESM_4.pdf”.

Captions

- For each supplementary material, please supply a concise caption describing the content of the file.

Processing of supplementary files

- Electronic supplementary material will be published as received from the author without any conversion, editing, or reformatting.

Accessibility

In order to give people of all abilities and disabilities access to the content of your supplementary files, please make sure that

- The manuscript contains a descriptive caption for each supplementary material
- Video files do not contain anything that flashes more than three times per second (so that users prone to seizures caused by such effects are not put at risk)

2.7 DOES SPRINGER PROVIDE ENGLISH LANGUAGE SUPPORT?

Check: http://www.springer.com/chemistry/journal/10967?detailsPage=pltc_i_2078107

3 SUBMISSION

Manuscript Submission

Submission of a manuscript implies that (i) the work described has not been published before; (ii) it is not under consideration for publication anywhere else; (iii) and its publication has been approved by all co-authors, if any, as well as by the responsible authorities, supervisors – 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. You have to answer to questions regarding these.

Permissions

Make sure that you have all the permissions that are needed to publish your work.

Authors wishing to include figures, tables, or text passages that have already been published elsewhere are required to obtain permission from the corresponding author as well as 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.

Online Submission

Authors should submit their manuscripts online. Please follow the hyperlink “Submit online” on the right and upload all of your manuscript files following the instructions given on the screen.

Please give the names and the email address of your co-authors. After submission, they will be informed about the submission.

Also give the names and the email addresses of a three-four potential reviewers working in a similar field but in another country. Note that your recommendations will not necessarily be used.

Answer all the questions regarding any earlier submissions, permissions etc.

Please fill in the Copyright Transfer Statement. Don't forget to sign it. Please upload it.

Upload your manuscript and picture files.

Once your submission has been checked for completeness, it will be checked by the editors and sent to reviewers within a couple of days. The reviewers normally have 10 days to accept the invitation and 30 days to prepare their reviews. Sometimes further reviews have to be invited. (If your paper is still under review after 45 days, that is what most likely has happened.) Once all the reviews are ready, they will be sent back to you with the final decision of the Editor-in-Chief.

4 REVISION

Only a very small fraction of the manuscripts are accepted as they are. Some of the manuscripts need just minor changes. A significant fraction of the manuscripts need major revisions, after which they will be sent back to the reviewers. Sometimes the editor rejects the incoming manuscripts. You will receive technical and editorial comments from the editors, too.

Please revise the manuscript according to the suggestions. When you submit the revised manuscript, please list all the points mentioned by the reviewers and editors. Reply them and also make the necessary changes in the manuscript. Note that you should not just reply to the reviewer, but you also need to modify manuscript. Please follow the following convention:

QUESTION: question or an observation of the reviewer

REPLY: reply to the question

ACTION: mention how you modified the manuscript.

You might not always agree with all the critical observations by the reviewers. In your reply, please express your opinion. The editors will decide if your arguments are acceptable.

After preparing the revised manuscript, please upload it in the same way as the original version. (Note: never upload a revision as a new submission.)

5 AFTER ACCEPTANCE

Upon acceptance of your article you will receive a link to the special Author Query Application at Springer's web page where you can sign the Copyright Transfer Statement online and indicate whether you wish to order OpenChoice, offprints, or printing of figures in color.

Once the Author Query Application has been completed, your article will be processed and you will receive the proofs.

Open Choice

See: http://www.springer.com/chemistry/journal/10967?detailsPage=plctci_2078107

Copyright transfer

Authors will be asked to transfer copyright of the article to the Publisher (or grant the Publisher exclusive publication and dissemination rights). This will ensure the widest possible protection and dissemination of information under copyright laws.

Open Choice articles do not require transfer of copyright as the copyright remains with the author. In opting for open access, the author(s) agree to publish the article under the Creative Commons Attribution License.

Offprints

Offprints can be ordered by the corresponding author.

Color illustrations

Online publication of color illustrations is free of charge. For color in the print version, authors will be expected to make a contribution towards the extra costs.

Proof reading

The purpose of the proof is to check for typesetting or conversion errors and the completeness and accuracy of the text, tables and figures. Substantial changes in content, e.g., new results, corrected values, title and authorship, are not allowed without the approval of the Editor.

After online publication, further changes can only be made in the form of an Erratum, which will be hyperlinked to the article.

Online First

The article will be published online after receipt of the corrected proofs. This is the official first publication citable with the DOI. After release of the printed version, the paper can also be cited by issue and page numbers.