

Instructions for Authors

ABOUT

OPEN PHYSICS (former Central European Journal of Physics) is an international single-blind peer-reviewed open access journal, devoted to the publication of fundamental research results in all fields of physics. Open Physics publishes research and review articles, rapid and short communications, comments and replies that cover the following areas of physical sciences. The journal has article processing charges (APCs).

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PUBLICATION FORMATS

OPEN PHYSICS considers submissions of:

- Research Articles
- Short Communications
- Rapid Communications*
- Review Articles
- Errata
- Retraction Notes

*Rapid Communications are intended to present information of exceptional novelty and extraordinary results of significant interest to the readers. Authors are asked to provide an explanation in the cover letter why their contribution should be handled *via* the rapid channel.

ELECTRONIC SUBMISSION

All submissions must be made *via* online submission system [Editorial Manager](#).

Manuscripts submitted under multiple authorship are reviewed on the assumption that all listed authors contributed to the work and are responsible for its content; they had to agree to its publication and gave the corresponding author the authority to act on their behalf in all matters leading to publication. The corresponding author is responsible to inform the coauthors of the manuscript status throughout the submission, review, and production process.

Electronic Formats Allowed

We accept submission of text, tables and figures as separate files or as a composite file. For your initial submission, we recommend you upload your entire manuscript, including tables and figures, as a single PDF file. If you are invited to submit a revised manuscript, please provide us with individual files: an editable text and publication-quality figures.

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It is important that authors include a cover letter with their manuscript. Please explain why you consider your manuscript as suitable for publication in OPEN PHYSICS, why will your paper inspire the other members of your field, and how will it drive research forward.

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Resubmitted manuscript should be accompanied by a letter outlining a point-by-point response to Editor's and reviewers' comments and detailing the changes made to the manuscript. A compare copy of the manuscript should be included if the Editor requested one. If it is the first revision authors need to return revised manuscript within 28 days; if it is the second revision authors need to return revised manuscript within 14 days. Additional time for resubmission must be requested in advance; further 14 days may be given to authors for further improvements. If the above mentioned deadlines are not met, the manuscript will be treated as a new submission.

Please provide us with an editable text and publication-quality figures:

- Tables also need to be included within an editable article file or be submitted separately as editable files.
- Supply any figures as separate high-resolution, print-ready digital versions.

In addition to the editorial remarks, authors are asked to take care that they have prepared the revised version according to the Journal's style. Please adopt numbered citation (citation-sequence) style referencing.

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It is essential that contributors prepare their manuscripts according to the instructions and specifications presented below.

General rules for writing

The work must demonstrate its novelty and importance to the field of physics its interest to physicists in general. Conclusions must be justified by the study; please make your argumentation complete and be self-critical as you review your drafts.

OPEN PHYSICS encourages the submission of both substantial full-length bodies of work and shorter manuscripts that report novel findings that might be based on a more limited range of experiments. There are no specific length

restrictions for the overall manuscript or individual sections; however, we urge the authors to present and discuss their findings in a concise and accessible manner.

Use simple and declarative sentences and commonly understandable terminologies; avoid long sentences and idle words. We recommend that for clarity you use the past tense to narrate particular events in the past, including the procedures, observations, and data of the study that you are reporting. Use the present tense for your own general conclusions, the conclusions of previous researchers, and generally accepted facts. Thus, most of the Abstract, Experimental Procedures, and Results should be in the past tense, and most of the Introduction and some of the Discussion should be in the present tense. Editors may make suggestions for how to improve clarity and readability, as well as to strengthen the argument.

Organization of the Manuscript

Articles should be organized into the following sections:

- Title page with: Title (and running title); Author's name(s); Affiliation(s); Address(es)
- Abstract
- Keywords
- Introduction
- Experimental Procedures
- Results
- Discussion
- Acknowledgments (if applicable)
- References
- Figure Legends and Table Captions
- Tables
- Figures
- Supplemental data (if applicable)

Each of these elements is detailed below. We draw particular attention of authors to the importance of carefully preparing the title, keywords and abstract as these elements are indicators of the manuscript content in bibliographic databases and search engines.

Title

We suggest the title should be informative, specific to the project, yet concise (75 characters or less). Please bear in mind that a title that is comprehensible to a broad scientific audience and readers outside your field will convey to wide readership of your article. Avoid specialist abbreviations and non-standard acronyms. Titles should not be presented in title case (words should not be capitalized). Please also provide a brief "running title" of not more than 50 characters.

Authors, Affiliations, Addresses

Provide the first names (or initials - if used), middle names (or initials - if used), surnames for all authors. Affiliations should include:

- Department
- University or organization
- City
- Postal code
- State/province (if applicable)
- Country

One of the authors should be designated as the corresponding author to whom inquiries regarding the paper should be directed. It is the corresponding author's responsibility to ensure that the author list and the summary of the author contributions to the study are accurate and complete. Place an asterisk after the name of the corresponding author and provide us with a valid e-mail address. Please note that a change in authorship (order of listing, addition or deletion of a name, or corresponding author designation) after submission of the manuscript will be implemented only after receipt of signed statements of agreement from all parties involved. Footnote can be used to present additional information (for

example: permanent, adequate, present postal addresses). If the article has been submitted on behalf of a consortium, all consortium members and affiliations should be listed after the Acknowledgments.

Abstract and Image accompanying abstract

The abstract should be succinct; it should not exceed 200 words. The abstract should give the idea of the basic content of the paper and is usually conceptually divided into: Background, Methodology, Principal Findings/Results, and Conclusions/Significance. Mention the techniques used without going into methodological detail and summarize briefly the most important items of the paper. Please do not include any citations or references to tables or figures, and avoid specialist abbreviations and symbols. Because the abstract will be published separately by abstracting services, it must be complete and understandable without reference to the text.

Authors may provide a striking image to accompany their article, if one is available. If the image (photo, graph, and scheme) is judged by the editors to be suitable for publication, it may be featured on the web to highlight the paper online. It is preferable, but not essential, that these should be related strictly to the subject reported in the manuscript. The image could originate from the experimental findings reported in the manuscript but does not have to constitute a part of the original work and need not be reprinted in the article. Images must be original and should be submitted as separate files.

Keywords

List keywords for the work presented (minimum of 4, and maximum of 10), separated by commas. We suggest that keywords are other than those used in the title.

Introduction

The introduction should put the focus of the manuscript into a broader context and should supply sufficient background information to allow the reader to understand and evaluate the results without referring to previous publications on the topic. As you compose the introduction, think of readers who are not experts in this field. Include a brief review of the key literature - use only those references required to provide the most salient background rather than an exhaustive review of the topic. Relevant controversies or disagreements in the field should be mentioned so that a non-expert reader can delve into these issues further. The introduction should conclude with a brief statement of the rationale for the study, the hypothesis that was addressed or the overall purpose of the experiments reported and should provide a comment about whether that aim was achieved.

Experimental Procedures

This section should include sufficient technical information to enable the experiments to be reproduced. Protocols for new methods or significant modifications to existing methods should be included, while previously published or well-established protocols should only be referenced. Describe new methods completely and give sources of unusual chemicals, equipment, strains etc. Studies presented should comply with our recommendations for Distribution of materials and data (see below). In theoretical papers comprising the computational analyses, technical details (methods, models applied or newly developed) should be provided to enable the readers to reproduce the calculations.

Results

This section should provide details of all of the experiments that are required to support the conclusions of the paper. Reserve extensive interpretation of the results for the Discussion section. Details of experiments that are peripheral to the main thrust of the article and that detract from the focus of the article should not be included. Present the results as concisely as possible in text, table(s), or figure(s) (see below). Avoid extensive use of graphs to present data that might be more concisely presented in the text or tables. Graphs illustrating methods commonly used need not be shown except in unusual circumstances. Limit photographs to those that are absolutely necessary to show the experimental findings. Number figures and tables in the order in which they are cited in the text, and be sure to cite all figures and tables. Styles and fonts should match those in the main body of the article. Large datasets, including raw data, should be submitted as supporting files. The section may be divided into subsections, each with a concise subheading.

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The Discussion should provide an interpretation of the results in relation to previously published work and to the experimental system used. It should not contain extensive repetition of the Results or reiteration of the Introduction. This

section should spell out the major conclusions of the work along with some explanation or speculation on the significance of these conclusions. The discussion should be concise and tightly argued.

The results and discussion sections may be combined into one section and can include additional subheadings.

Acknowledgments

This section should describe sources of funding that have supported the work. Please also describe the role of the study sponsor(s), if any, in study design; collection, analysis, and interpretation of data; writing of the paper; and decision to submit it for publication. Recognition of personal assistance should be given as a separate paragraph: people who contributed to the work, but do not fit the criteria for authors should be listed along with their contributions. You must ensure that anyone named in the acknowledgments agrees to being so named.

References

Because all references will be linked electronically to the papers they cite, proper formatting of the references is crucial. A complete reference should give the reader enough information to find the relevant article. Please pay particular attention to spelling, capitalization and punctuation. **Completeness of references is the responsibility of the authors.**

References to unpublished or submitted work, unpublished conference presentations, personal communications, patent applications and patents pending, computer software, databases, and websites should be referred to as such only in the body of the text. These should be kept to the minimum.

The examples are as follows:

- (J. Smith, unpublished data)
- (J. Smith and P. Brown, submitted for publication)
- (J. Smith, personal communication)
- (J. Smith and P. Brown, presented at the 4th Symposium on Food Microbiology, Overton, IL, 13 - 15 June 1989)
- (J. C. Odell, April 1970, Process for batch culturing, U.S. patent 484,363,770)
- (J. Smith, 20 June 1999, Australian Patent Office)
- ... from the GenBank database (<http://www.ncbi.nlm.nih.gov/Genbank/index.html>)
- ... using ABC software (version 2.2; Department of Microbiology, State University, <http://www.stu.micro>)

Published or accepted ('in press') manuscripts, books and book chapters, theses should be included in the reference list. References to published meetings abstracts should be kept to the minimum.

For all references, list the first six authors; add "et al." if there are additional authors. Standard abbreviations of journal names according to Thomson Scientific should be used (<http://ip-science.thomsonreuters.com/cgi-bin/jrnlist/jloptions.cgi?PC=master>).

Please use the following Vancouver style for the reference list:

Published Papers

- Halpern SD, Ubel PA, Caplan AL. Solid-organ transplantation in HIV-infected patients. *N Engl J Med.* 2002;347(4):284-7. doi:10.1157 2002-x34742847.
- Rose ME, Huerbin MB, Melick J, Marion DW, Palmer AM, Schiding JK, et al. Regulation of interstitial excitatory amino acid concentrations after cortical contusion injury. *Brain Res.* 2002;935(1-2):40-6. doi.10.18.x548689553.
- Ellingsen AE, Wilhelmsen I. Sykdomsangst blant medisin- og jusstudenter. *Tidsskr Nor Lægeforen.* 2002;122(8):785-7. Norwegian.
- Mansharamani M, Chilton BS. The reproductive importance of P-type ATPases. *Mol Cell Endocrinol.* 2002;188(1-2):22-5. Corrected and republished from: *Mol Cell Endocrinol.* 2001;183(1-2):123-6.

Unpublished Material /Forthcoming and Preprints

- Tian D, Araki H, Stahl E, Bergelson J, Kreitman M. Signature of balancing selection in Arabidopsis. Proc Natl Acad Sci U S A. Forthcoming 2002.
- Alvarez R. Near optimal neural network estimator for spectral x-ray photon counting data with pileup. arXiv:1702.01006v1 [Preprint]. 2017 [cited 2017 Feb 9]: [11 p.]. Available from: <https://arxiv.org/abs/1702.01006>
- Bar DZ, Atkatsk K, Tavarez U, Erdos MR, Gruenbaum Y, Collins FS. Biotinylation by antibody recognition- A novel method for proximity labeling. BioRxiv 069187 [Preprint]. 2016 [cited 2017 Jan 12]. Available from: <https://www.biorxiv.org/content/10.1101/069187v1>

Electronic Journal Articles

- Abood S. Quality improvement initiative in nursing homes: the ANA acts in an advisory role. Am J Nurs [Internet]. 2002 Jun [cited 2002 Aug 12];102(6):[about 1 p.]. Available from: <https://ovidsp.tx.ovid.com/> Subscription required.

Books and book chapters

- Murray PR, Rosenthal KS, Kobayashi GS, Pfaller MA. Medical microbiology. 4th ed. St. Louis: Mosby; 2002.
- Gilstrap LC 3rd, Cunningham FG, VanDorsten JP, editors. Operative obstetrics. 2nd ed. New York: McGraw-Hill; 2002.
- Meltzer PS, Kallioniemi A, Trent JM. Chromosome alterations in human solid tumors. In: Vogelstein B, Kinzler KW, editors. The genetic basis of human cancer. New York: McGraw-Hill; 2002. p. 93-113.

Theses

- Borkowski MM. Infant sleep and feeding: a telephone survey of Hispanic Americans [dissertation]. Mount Pleasant (MI): Central Michigan University; 2002.

Conference proceedings

- Harnden P, Joffe JK, Jones WG, editors. Germ cell tumours V. Proceedings of the 5th Germ Cell Tumour Conference; 2001 Sep 13-15; Leeds, UK. New York: Springer; 2002.

Conference paper

- Christensen S, Oppacher F. An analysis of Koza's computational effort statistic for genetic programming. In: Foster JA, Lutton E, Miller J, Ryan C, Tettamanzi AG, editors. Genetic programming. EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming; 2002 Apr 3-5; Kinsdale, Ireland. Berlin: Springer; 2002. p. 182-91.

Newspaper articles

- Tynan T. Medical improvements lower homicide rate: study sees drop in assault rate. The Washington Post. 2002 Aug 12;Sect. A:2 (col. 4).

References are listed and numbered in the order that they appear in the text. In the text, citations should be indicated by the reference number in brackets. Multiple citations within a single set of brackets should be separated by commas. Where there are more than three sequential citations, they should be given as a range. References in figure captions and tables should be listed as last.

Before submitting your article, please make sure you have carefully checked the manuscript for any relevant references you may have missed.

Figures and Figure Legends

Authors may use photographs, schemes, diagrams, line graphs and bar charts to illustrate their findings. Figures included with online submissions should be suitable for onscreen viewing and desktop printing. High resolution images should be provided on request or on manuscript acceptance. The figures and their lettering should be clear and easy to read i.e. no labels should be too large or too small. Photomicrographs should include a scaled bar and indicate the size.

We remind authors that it is not acceptable scientific conduct to modify any separate element within an image (adjustments of the entire image in brightness, contrast and color balance are justified only if they do not misrepresent the original, observed data). Composite figures composed of grouped images such as insets from different fields or separate parts of gels must be explained in the figure legend and differentiated by use of dividing lines or other means to make composites unambiguous. Figures should be numbered consecutively using Arabic numerals and referred to in the text by number. Figure legends should follow the main text, each on a separate page. Each figure legend should have a concise title and should provide enough information so that the figure is understandable without frequent reference to the text. It should inform the reader of key aspects of the figure, but the figure should also be discussed in the text. The legend should be succinct, while still explaining all symbols and abbreviations. Avoid lengthy descriptions of methods.

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Tables must include enough information to warrant table format and should be used only where information cannot be presented in the text. Tables should be typed as text, using either 'tabs' or a table editor for layout, please do not use graphics software to create tables. Tables occupying more than one printed page should be avoided, if possible; larger tables can be published as appendix. Do not use picture elements, text boxes, tabs, or returns in tables. Tables that contain artwork, chemical structures, or shading must be submitted as illustrations. Tables should be numbered consecutively using Arabic numerals and referred to in the text by number. Table legends should follow the main text, each on a separate page. Each table should have an explanatory caption which should be as concise as possible. The headings should be sufficiently clear so that the meaning of the data is understandable without reference to the text. Footnotes can be used to explain abbreviations but should not include detailed descriptions of the experiment. Citations should be indicated using the same style as outlined above.

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In-line equations should be typed as text. The use of graphics programs and 'equation editors' should be avoided.

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Supplemental Material

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