

Information for Authors Advanced Biomedical Engineering

Effective from May 2012.
Ver 2 was effective from May 2014.
Ver 3 was effective from April 2015.
Ver 4 is effective from Aug 2015.

Advanced Biomedical Engineering (ABE) is the official online English journal of Japanese Society for Medical and Biological Engineering.

Manuscripts should be written in English, and prepared according to Instructions for Manuscript Preparation. The submitted paper is peer-reviewed, and the acceptance for publication is decided upon appraisal by the Editorial Board of ABE.

This stipulation of ver 4 has been revised based on the recommendations of International Committee of Medical Journal Editors (ICMJE).¹

1. Manuscript Category, Content and Length

1.1 Review Papers

The latest technology and research findings related to medical and biological engineering are introduced in the format of review papers. An author of a review paper is requested by the Editorial Board. The length requirement depends on the content, and is decided by the Editorial Board on a case-by-case basis.

1.2 Original Papers

Since this category publishes new research achievements consistent with the objectives of the society, original articles should contain highly objective contents. The contents are preferably related to both medicine and engineering.

They should contain the following elements: (i) purpose of the study and potential benefits from application of the findings; (ii) differences between the conventional approach and the new approach; (iii) a representative set of experimental results or computation; and (iv) outcome of the study. It is recommended that the length does not exceed six printed pages.

1.3 Research Letters

Although these papers are not as complete as those required for the afore-mentioned Original Papers, they should report new concepts, new experimental facts, and other new findings that merit early publication. It is recommended that the length does not exceed four printed pages.

¹ The most recent version of the recommendations is available on www.icmje.org.

1.4 Technical Notes

This category includes experimental results and design data for systems, parts and others, as well as survey results related to medical and biological engineering, which are deemed useful resources for the readers. It is recommended that the length does not exceed two printed pages.

2. Page Charges

No fee will be charged for publication for the time being.

3. Submission Procedures

The procedures to submit an original article are as follows. Prepare the manuscript in accordance with Instructions for Manuscript Preparation. Convert the Submission Form, text of manuscript, and tables and figures into PDF files.

<http://www.editorialmanager.com/abe/default.aspx>

Details of submission procedures are described in Instructions for Manuscript Preparation.

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4. English

The manuscript should be written in proper American English used in writing scientific publications.

The submitted manuscript should be checked by professional English editing agency or specialists of English technical writing in your university or institute before submission. Grammatically improper manuscript will be rejected by the Editorial Board before peer review.

Technical English often differs from general English in wording and expression. We strictly recommend you to have your manuscript edited for English by a professional English agency specializing in technical writing before submission.

5. Copyright

The copyrights of all papers published in ABE are owned by the society. However, when there is a need as recognized by the society or a request for permission of quotation from an outside source, reprint or use of copyrighted works may be granted upon deliberation at the Editorial Board.

6. Ethical Consideration

A submitted paper should comply with the requirements described below, with the appropriate item clearly stated in the paper. A manuscript not fulfilling this condition will be rejected. Authors should submit a statement from the authors' institutional ethic committee if it is requested by the Editorial Board, and the Editorial Board reserves the right to reject the paper even if a formal approval has been obtained, when the paper does not reach a high ethical standard.

- 1) Studies on human subjects should conform to the ethical principle provided by Declaration of Helsinki; obtain informed consent from subjects; and have been approved by the local ethics committee or an equivalent body. Anonymity must be maintained for protection of personal information.
- 2) Studies involving vertebrates or any regulated invertebrates should be approved by the authors' institutional review board or by equivalent ethics committee(s). And, the study must be conducted according to applicable international and national laws and guidelines.

7. Disclosing Conflict of Interest

The authors must disclose any potential conflicts of interest as defined in Table 1.

If the authors bear any potential conflict of interest relationship with any companies or commercial organizations other than the organizations where they belong, they must disclose the relationship in their manuscript. If the authors bear no such relationship, they should declare as follows: "We have no conflicts of interest relationship with any companies or commercial organizations based on the definition of Japanese Society for Medical and Biological Engineering." Details of the relationship are defined in the attached Table 1.

In the case of doubt, contact Editorial Office of ABE.

8. Prohibition of Multiple Submissions and Multiple Publications

For Original Papers, Research Letters, and Technical Notes, it is prohibited to submit a paper with identical contents or substantially the same contents as a paper already published or under consideration for publication.

Note that such manuscripts that have been published as proceedings are subject to this multiple publication rule. "Proceedings" contain one or more pages, and authors can describe some details about their research sometimes using figures and tables. If the paper is an abstract, which contains only some hundreds of words and no figures or tables, it is not subject to this rule.

In case of doubt, contact Editorial Office of ABE.

9. Authorship

Authors are responsible for their published work. The criteria to define authors are presented below.

(AS-1) Substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work.

(AS-2) Drafting the work or revising it critically for important intellectual content.

(AS-3) Final approval of the version to be published.

(AS-4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work.

Note that authors *should meet all the criteria*, and those who do not meet all the criteria should be acknowledged, not an author.

In addition, an author should be able to identify who is responsible for other parts of the submitted work than he or she has done.

A corresponding author is the one who takes primary responsibility for communications with the ABE editors or the editorial office.

10. Review Process

ABE recognizes that manuscripts submitted to ABE are privileged communications of the authors; the authors' private and confidential property. ABE keeps an editorial process confidential including whether a manuscript has been received or under review, the contents, the status of review, criticism arisen by reviewers. Reviewers of ABE also keep a review process confidential.

11. Supplemental Material and Multimedia

11.1 Overview

There are fields in biomedical engineering in which presentation of movies or high resolution images as a part of the results facilitates understanding of the contents of a paper. Some examples are the field of medical virtual reality and the field of medical imaging proposing an image processing algorithm. Moreover, by publishing the source code of the program that implements the algorithm together with the paper, it is expected that this will enhance the readers' understanding of the algorithm.

For this reason, authors who submit papers to ABE may also deposit movies, high resolution images and source codes as supplemental materials. The supplemental materials will be posted on line together with the accepted paper.

For the method of submission, file format and file size for the supplemental materials, please refer to “Instructions for Manuscript Preparation”.

11.2 Language used in supplemental materials

The contents and narrations in supplemental materials should be in English.

11.3 Peer review

The fields described in Table 2 are those in which attaching supplemental materials will enhance comprehension of the contents of papers, and hence deposition of supplemental materials is recommended. When manuscripts belonging to these fields are submitted with supplemental materials, the supplemental materials will be peer reviewed.

On the other hand, when manuscripts not belonging to these fields are submitted with supplemental materials, the authors can choose whether or not to have the supplemental materials peer-reviewed. If the supplemental materials are dispensable for the understanding of the manuscript, then they would require peer review. If they are only reference materials, peer review is not necessary.

However, the final decision of whether the supplemental materials are subject to peer review will be made by the Editorial Board. For example, if attachment of supplemental materials does not improve the readability of the paper, then the authors may be instructed to remove the supplement materials. Even for supplemental materials that are not subject to peer review, if the Editorial Board decides that the materials are redundant, then the authors will be instructed to remove the materials.

11.4 Copyright

The copyrights of the supplemental materials are transferred to the Japanese Society for Medical and Biological Engineering, regardless of where the materials have been peer reviewed.

When the authors themselves wish to reuse the supplemental materials, the society will decide promptly whether to allow such use. In this regard, the policy is to grant permission in principle. Contact the editorial office in case of a request for reuse.

11.5 Copyright of source code

The copyright of the source code distributed as supplemental material is transferred to the Japanese Society for Medical and Biological Engineering. However, the authors reserve the right to modify the source code.

In addition, the authors should state in the supplemental materials under what conditions readers can utilize the source code. The authors should state their view regarding modification of source code, restriction of commercial use, and copyright of the modified source code.

11.6 English editing

The authors should have the supplemental materials edited for English, as for the main manuscript.

Table 1. Criterion of conflict of interest

If one of the authors personally received more than or equal to 1,000,000 JPY (or the equivalent foreign currency) in one year from any company or commercial organization.

Table 2. Fields for which supplements are recommended

Medical image processing, medical augmented reality, and computational surgery.
