

Biophysics and Physicobiology (BPPB) **ON-LINE JOURNAL**

INSTRUCTIONS FOR AUTHORS

Biophysics and Physicobiology (BPPB) is the official on-line journal (e-journal) of the Biophysical Society of Japan (BSJ). This journal inherited all the assets of *BIOPHYSICS*, the former BSJ official journal and expanded its scope to keep abreast of the future direction of the field.

Biophysics has covered a broad range of biological and physical issues and *BIOPHYSICS* played a role of a research forum for researchers from different backgrounds including physicists, biologists, engineers and so forth. Among the biophysicists, a quantitative consideration for biological issues based on physical and mathematical principles has been the common basis of this forum. Biophysics now spans all scales of biological organization, from the molecular scale to whole organisms and ecosystems, and hence biophysical research demonstrates significant overlaps with biochemistry, physiology, cell biology, nanotechnology, bioengineering, computational biology, systems biology, theoretical biology and so forth, and the field has evidently grown over the first idea in “biophysics”. This outgrowth has been realized by the enthusiastic integration of ideas from physicists and biologists on various biological issues. *Biophysics and Physicobiology* is a forum for the discussion between physicists studying biology and biologists studying physics. By including the term *physicobiology* in the name of the journal, we intend to widen the scope of the journal to broader range of biologists and further stimulate the exchange of ideas among the biophysicists.

Based on the ideas above, *Biophysics and Physicobiology* widely covers the topics of physiology, molecular and cellular biology, genome biology, systems biology, synthetic biology, bioinformatics, mathematical biology, quantitative biology, photobiology, mechanobiology, thermobiology, neuroscience, behavioral biology, developmental biology, quantum biology, radiobiology, and rising fields of biology under the extreme environments, space life science, nanobiology, and other various fields of biology. These fields can be represented by, but not limited to, the following keywords: protein (structure, function, expression, measurement and analysis); nucleic acid (structure, function, expression, measurement and analysis); genome (structure, function, interaction, measurement and analysis); biological and artificial membrane (structure, function, dynamics, synthesis, excitation and channels, transport); molecular motors; electronic state; hydration and electrolyte; chemoreception; neuronal circuit and information processing; vision and photoreception; photosynthesis; signal transduction; origin of life and evolution; nonequilibrium state; biological rhythm and so forth.

We intend to provide the biophysicists in the Asia-Pacific area the opportunity to publish original research in *Biophysics and Physicobiology*. Scientists from Australia, China, Hong Kong, India, Korea, Singapore, Taiwan, as well as Japan, have been invited to serve as Associate Editors. To make the Asia-Pacific region a world leading center of biophysics, submission of papers is encouraged not only from the Asia-Pacific region, but also from all over the world.

Categories of Articles

Articles that *Biophysics and Physicobiology* publishes are categorized into (1) Regular Articles, (2) Review Articles, (3) Notes, (4) Experimental Methods and Protocols, (5) Databases and Computer Programs, (6) Commentary and Perspectives, and (7) Editorials.

(1) Regular Articles are the main category of the journal and must be prepared in accordance with the instructions provided below.

(2) Review Articles summarize a particular aspect of biophysical research. Most of the Review Articles are invited, but contributed Review Articles are also welcome (please send inquiries with an outline to the Editor-in-Chief before sending the manuscript).

(3) Notes are short articles that are not necessarily categorized into Regular Articles because of the content, containing important information on new devices and/or new ideas including hypothetical comments that are useful for researchers working in the field of biophysics. The goal of this category is to encourage critical evaluation of the concepts, idiosyncratic viewpoints, and challenges to ideas. However, the manuscript should go through rigorous review, and the ideas should be based on sound data without excessive speculation.

(4) Experimental Methods and Protocols cover new methods or significant new advancement of established methods that will be widely applicable to the field of experimental biophysics.

(5) Databases and Computer Programs should be a description of the core data or software that would be useful for biophysics studies. The databases/computer programs should be available via website designated by the authors or via *Biophysics and Physicobiology*. The review process of this category is based on the functionality of the database/computer program.

(6) Commentary and Perspectives introduce hot topics in the field of biophysics and those with global collaborations. Most of the Articles in Commentary and Perspectives are invited from the organizers of the annual BSJ meetings or other scientific meetings, but contributed articles are also welcome (please send inquiries with an outline to Editor-in-Chief before sending the manuscript).

(7) Editorials are written by Editor-in-Chief, Editorial Board members and Guest Editor-in-Charge for Special Issues, introducing new policies, comments and new editorial board members.

Special Issue

We welcome a proposal of a topic for Special Issue, which is, in principle, composed of more than four articles focusing on a particular biophysical issue, from the members of the Society, the Editorial Board, Associate Editors and

Advisory Board. The proposer should contact the Editor-in-Chief directly, and may take on the duty of a Guest Editor-in-Charge. Note that these special issues are not invited, but all the manuscripts are reviewed, and the publication and page charges must be paid. In addition, the proceedings of a scientific meeting can be considered for a special issue publication.

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SM will automatically convert the uploaded files into single PDF and HTML documents so that they can be viewed and printed for peer reviewing. Authors must verify that the PDF file is satisfactory and complete.

If there is any problem with on-line submission, please contact the editorial office below.

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4. Supplementary materials (such as movie files).
 - a. Image files should be in TIFF, EPS, JPEG, PNG or PDF format, and movie files in MPEG or AVI format.
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Manuscript Style

1. Manuscripts should be double-spaced throughout, formatted for A4 (297 x 210 mm portrait) size paper, and using approximately 25 mm (one inch) margins on all sides. Page 1 should contain the article title, author name(s), affiliation(s), address(es), and suggested running title (not exceeding 50

characters including spaces). The complete postal address and E-mail address of the corresponding author should be indicated. Page 2 should contain a short abstract of no more than 250 words. The abstract must not include references. A list of up to five keywords (not used in the title) should be provided below the abstract. From Page 3 onwards, Introduction, Materials and Methods (or Methods), Results, Discussion (or Results and Discussion), Conclusion, Acknowledgement, References, Figure Legends, and Tables should be arranged in this order.

2. Use only 1-byte and/or ASCII-code fonts for alphanumeric characters. Use Symbol fonts for Greek letters and special characters. Do not use 2-byte/multi-byte or country-specific codes such as ■ and ○.
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6. Significance: *Biophysics and Physicobiology* requires a short statement of less than 100 words about the significance of the new paper. This Significance statement will be published on the web-site of the Society with the short title (less than 15 words in length). The Significance statement must be entered through the online submission system.
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 [12] Go, M. Protein structures and split genes. in *Adv. Biophys.* (Kotani, M. ed.) vol. 19, pp. 91–131 (Japan Sci. Soc. Press and Elsevier Sci. Pub., Tokyo and Limerick, 1985).
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Final approval of the version to be published. The contribution of all the authors should be listed in a separate section at the end of the manuscript. For example,

A.B., C.D., and E.F. directed the entire project and co-wrote the manuscript. I.J. synthesized and characterized materials. K.L. carried out diffractometry analyses. M.N. performed NMR measurements. O.P.Q. and R.S. carried out *ab initio* calculations.

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Addenda are judged on the significance of the addition to the interpretation of the original publication. Addenda do not contradict the original publication, but if the authors inadvertently omitted significant information available to them at the time, this material will be published as an addendum after peer review.

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Revised 14th, December, 2019.