PJA Series B Instructions to Authors

Manuscripts for publication in the Proceedings of the Japan Academy (PJA), Series B should be prepared and submitted according to the following instructions.

General Information

1. Aims and scope

The Proceedings of the Japan Academy, Series B was founded in 1912 as the Proceedings of the Imperial Academy by the Imperial Academy of Japan (now the Japan Academy). The Journal was split into the Proceedings of the Japan Academy, Series A and Series B in 1977. PJA Series B publishes reviews and original articles in broad fields of natural sciences, such as physics, chemistry, astronomy, earth sciences, biology, engineering, agricultural sciences, medicine and pharmacy.^{*)} Manuscripts are evaluated at least by two reviewers. Ten issues are published per year. The content is open access and available online through J-STAGE (https://www.jstage.jst.go.jp/browse/pjab).

*) For papers in mathematics, please refer to the Notice to Authors of the PJA Series A.

2. Categories

PJA Series B publishes articles in the following categories.

- a) **Review:** Papers that review the literature and provide summary views of particular subjects or fields. They can be objective and balanced overviews or can also be summaries of the authors' own accomplishments in the style of personal reminiscences. In the former case, the authors are anticipated to have actively contributed to the subjects under review. In the latter scenario, the scientific context surrounding the authors' work should be appropriately and fairly presented, ensuring a proper contextualization of the authors' contributions.
- b) **Original article:** Papers that describe hitherto unpublished original works.
- c) **Special article:** From time to time the PJA Series B publishes a limited number of short commentaries or essay-style articles on subjects deemed appropriate and timely by the Editorial Board. In principle, the Editorial Board will solicit manuscripts of this kind.
- 3. Procedures

Anyone can submit manuscripts for consideration for publication in the PJA Series B. Authors are free to consult any members of the Academy during the preparation of their manuscripts. All submitted manuscripts undergo the following editorial procedures:

- a) Each submitted manuscript is assigned to a handling editor, who is a member of the Japan Academy, according to the area of his/her expertise. The assignment of the handling editor is strictly a prerogative of the Editorial Board. The manuscript is evaluated by at least two referees. Editor-in-Chief and the handling editor make the final decision regarding acceptance or rejection after taking into consideration the opinions of the referees.
- b) The handling editor communicates the accepted manuscript at a monthly meeting of the Academy. When a member of the Academy is an author, he/she communicates the manuscript himself/herself instead of the handling editor.
- 4. Submission of manuscripts
 - a) Submission of manuscripts is welcome from all around the world. Manuscripts must be prepared in accordance with the guidelines outlined in the "Preparation of Manuscript" part below.
 - b) The manuscript must be accompanied by a cover letter that includes ethical information (see Section

9) and potential reviewers (see Section 5).

- c) The manuscript and the cover letter are to be submitted through the online system (https://mc. manuscriptcentral.com/pjab). Please list co-authors' information in the system, including their e-mail addresses. If submitting via e-mail, the Editorial Office will post it on the online system on behalf of the authors; ensure that the e-mail addresses of the co-authors are provided in the cover letter or manuscript.
- d) The contact information for the Editorial Office is as follows:

Editorial Office of the Proceedings of the Japan Academy, Series B c/o The Japan Academy, 7-32, Ueno Park, Taito-ku, Tokyo 110-0007, Japan Tel: +81-3-3822-2101 Fax: +81-3-3822-2105 e-mail: <u>proc-b@mext.go.jp</u>

5. Recommendation of potential reviewers

Authors are encouraged to provide a list of 3-5 names, along with affiliations and e-mail addresses of individuals whom they consider knowledgeable, impartial, and fair, and therefore suitable as reviewers for the manuscript. Individuals currently employed at the same institution as any of the authors or those who have been close collaborators in the recent past (e.g., within the past three years) should not be included in the list. See also the Editorial Policy (https://www.japanacad.go.jp/en/publishing/pia b/editorialpolicy.html). Authors may also specify individuals they wish to exclude from the evaluation process, providing reasons for such requests. It is important to note, however, that the final decision regarding the selection of reviewers rests with the Editorial Board.

6. Reprints

Authors are eligible to receive up to 50 complimentary copies of the reprints for each published paper. Additional reprints can be obtained at the author's expense. The reprint order form will be accessible during the proofreading stage, and orders are accepted exclusively in Japanese yen.

7. Conflict of interest

Authors must include a "Conflict of interest" section in their papers to declare whether they have any employment or financial interests related to the submitted paper. Conflicts of interest apply to those within the past three years at the time of submission. Please also see the Editorial Policy for more information (https://www.japan-acad.go.jp/en/publishing/pja b/editorialpolicy.html).

8. Authorship

Authors' names should be properly listed. All authors must have reviewed the final manuscript and agreed to submit it to the PJA Series B. Please also see the Editorial Policy for more information (https://www.japan-acad.go.jp/en/publishing/pja_b/editorialpolicy.html).

9. Ethical considerations

Publication or submission of duplicate work is prohibited. For experiments involving human subjects, authors should specify if the procedures adhered to ethical standards set by the responsible committee on human experimentation (both institutional and national) and compiled with the Helsinki Declaration of 1975, as revised in 2013 (https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/). For experiments involving animals, authors should state that they followed institutional and national guidelines for the care and use of laboratory animals. These details, when applicable, should be included in the text.

10. Charges

PJA Series B does not impose any processing or publishing fees, except for the color charge (refer to Section 23d) and the fee for additional reprints (see Section 6). The publication expenses for the PJA Series B are funded by the annual budget of the Japan Academy.

11. Copyright and Open Access

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12. License to Publish

Authors are required to sign the License to Publish to permit the Japan Academy to publish their work in the PJA Series B under a Creative Commons license and other conditions. The license document will be sent after acceptance of the manuscript.

13. Preprint

The PJA Series B encourages authors to deposit early versions of articles in appropriate repositories or preprint servers. Preprints are not considered publications, but all other prior/redundant publications are forbidden. Please specify the use of preprint servers in the cover letter and provide the link to the preprint. Upon publication, authors are requested to establish a link from the preprint to the published article using the Digital Object Identifier (DOI).

14. Advance online publication

Accepted manuscripts are typically published within about two months, with the option for authors to release the first proof online on J-STAGE if desired.

Preparation of Manuscript

15. Templates etc.

The manuscript should be written in English on the A4-size paper in a single-column format. The text should be prepared using either Microsoft Word or TeX (LaTeX). Manuscript templates are available for download on the website (https://www.japan-acad.go.jp/en/publishing/pja_b/authors.html). The use of the templates is optional.

16. Length

Manuscripts should be written clearly and concisely, avoiding redundancy and excessive details. The general guideline recommends a length of 20 printed pages or fewer for a review and 10 printed pages or fewer for an original article. Shorter manuscripts are also welcome.

17. Title page

The title page should carry the following contents. If the required contents are included, there is no need

to list them.

- a) The category (i.e. Review, Original article)
- b) Title
- c) Full names of all authors
- d) Affiliations, cities, countries of all authors and ORCIDs (Open Researcher and Contributor IDs) (if authors have accounts.)
- e) Running title (no more than 70 characters, including spaces; it will be at the top of each odd-numbered printed page)
- f) Corresponding author's name, complete address, and e-mail address
- g)Abstract (no more than 160 words; It must be written in one paragraph). The author should keep in mind that the readers of this journal are spread across a wide range of natural science branches. The abstract should be understandable by readers who are not specialists in the field covered by the manuscript.
- h) Keywords (up to 6; each keyword should be divided by commas)
- i) Non-standard abbreviation list (see Section 21)
- j) The total word count and the word count of the abstract should be provided if the software used to prepare the manuscript allows.
- k) Fields (select a field from the following: Agricultural sciences, Astronomy, Biology, Chemistry, Earth and Planetary Science, Engineering, Medical sciences, Physics, Other fields; In the online system, this is asked in the specific section and is not necessary to describe in the title page.)
- 18. Graphical abstract

The graphical abstract will be included on the table of contents and abstract pages when the paper is published online on J-STAGE. Authors are requested to prepare a graphical abstract when the paper is accepted. Creating a graphical abstract is not mandatory, but this journal encourages authors to create it. Writing the title and legends is optional. Graphical abstract should convey the main idea of the paper to readers. A figure from the paper may be used in the graphical abstract.

19. Manuscript organization

Sections in the manuscript should feature bold-faced headings. The text should start on a new line after the section heading. For subsections and sub-subsections, employ bold and italic fonts, respectively. The text should persist on the same line after headings in subsections and sub-subsections. For reference formatting, please consult a recent issue of the journal. Ensure the paper is clearly written to cater to diverse readers in various disciplines. The manuscript may be structured in the following order:

a) Introduction

- b) Main Text; It is recommended that the Materials and methods section be placed after the Results and Discussion (although these sections may not be included depending on the content of the paper).
- c) Conflict of interest
- d) Acknowledgement(s)
- e) References
- f) Figure legends
- g) Tables
- h) Figures

20. Equations

Equations should be numbered sequentially with Arabic numerals within parentheses (e.g. [1], [2]) on

the right-hand side.

21. Units and abbreviations

The International System of Units (SI units) is recommended. If the author uses non-standard abbreviations, they should be defined at their first appearance by the full words and the abbreviations in parentheses. Thereafter use the abbreviation only. If there are many abbreviations, they may be listed in a footnote. Abbreviations should be listed in alphabetical order. In view of the wide coverage of this journal encompassing all branches of natural science, use of abbreviations should be limited to those instances where their use is essential. Common or even standard abbreviations in one discipline may be totally unintelligible in another discipline.

22. References

Only references that have been published or accepted for publication in the final form can be cited. Findings that are still under consideration for publication may be mentioned in the text as "personal communications", "in preparation for publication", or "submitted for publication", but should not be listed in the References. Avoid citing publications not generally available to the public unless absolutely necessary. If such publications are cited, the author should be ready to provide a copy upon request from readers. In principle, the Uniform Resource Locator (URL, "web address") should not be listed in the References but should only be cited within the text due to their lack of archival permanency. However, the citation of articles in preprint servers with URLs is permitted.

Citation in the text

a) References should be cited in the text in the order of citations in Arabic numerals in superscript, each followed by a closing parenthesis and a comma between the citation numbers. Consecutive references can be connected by an en dash (e.g. ^{1)-3);5)}.

List of references

- a) All references cited in the text with reference numbers should be listed under the heading "References". In principle, only one reference should be listed under a single reference number. When multiple chapters are cited from a single book, each chapter should be treated as a separate citation and should be listed under its own reference number. Except for entire book citations, the article/chapter titles and the first and the last page numbers or the article number are required.
- b) For the initial submission of the manuscript, it is imperative to list the names of all authors in the References. This is necessary for a fair editorial evaluation of the manuscript. However, only the first 6 authors should be listed for revisions or final submissions, followed by *et al.* when the number of authors exceeds six.
- c) References in journals should be listed according to the following examples.

Furuya, S., Ono, K. and Hirabayashi, Y. (1995) Sphingolipid biosynthesis is necessary for dendrite growth and survival of cerebellar Purkinje cells in culture. J. Neurochem. **65**, 1551–1561.

Nagata, S. Cloning of human Type I interferon cDNAs. Proc. Jpn. Acad. Ser. B (in press).

d) Chapters in multi-authored books should be listed according to the following example.

Sugimura, T., Nagao, M. and Wakabayashi, K. (2000) Complex factors pertinent to human hazard risks. *In* Food Borne Carcinogenesis: Heterocyclic Amines (eds. Nagao, M. and Sugimura, T.). Wiley, New York, pp. 349–359.

e) An entire book should be listed according to the following example.

Noyori, R. (1994) Asymmetric Catalysis in Organic Synthesis. Wiley, New York.

f) Online articles and preprints in the preprint server should be listed according to the following example.

Takahashi, K., Nakamura, M., Narita, M., Ueda, M., Takashima, Y., Watanabe, A. and Yamanaka, S. (2021) The pluripotent stem cell-specific transcript ESRG is dispensable for human pluripotency. PLOS Genetics **17**, e1009587.

Iye, M. (2021) Subaru Telescope – History, active/adaptive optics, instruments, and scientific achievements. arXiv:2105.10610.

g) For other types of references, consult examples in recent issues of this journal.

23. Figures

Figures should be clear enough to be used at the desired printed size. Individual figure must be on separate pages.

- a) Letters and symbols in figures should be large enough to be clearly reproduced.
- b) Desired printed size (cm) of each figure should be indicated. If the size of the figure proposed by the author is considered unsuitable for publication, it may be adjusted appropriately at Editor's discretion.
- c) Each figure should indicate the figure number and whether the figure should be printed in color or black and white.
- d) Color figures are complimentary when they can be accommodated within one printed page of the journal. However, any excessive use of color pages will incur charges borne by the author. The current fee for color figures exceeding one printed page is ¥22,000 per page or a fraction thereof (as of December 2024). There is no fee for color figures published exclusively online. In cases where the Editorial Committee deems it suitable, the journal may cover additional costs. For further details, please contact the Editorial Office.
- e) Figures must be numbered sequentially with Arabic numerals (e.g. Fig. 1, Fig. 2).
- f) Don't use narrow hatch patterns because they tend to generate moiré patterns.
- g) Figures must be saved with a resolution at 300 dpi or higher. Following formats can be accepted: PDF, TIFF, EPS, JPEG, GIF, PNG, BMP, Adobe Illustrator, Adobe Photoshop, Microsoft PowerPoint,

Microsoft Word, and Microsoft Excel. If the authors would like to use other file formats, please contact the Editorial Office.

24. Tables

The table caption should be placed at the top of the table. Vertical lines should not be used and horizontal lines should be minimized. Tables should be numbered consecutively in the order of their appearance in Arabic numerals (e.g. Table 1, Table 2).

25. Movies

Videos may be used as the main content of a paper or as supplementary materials. In principle, the size limit is 50MB per paper. Recommended file format is mp4, wmv and avi. For more information, please contact the Editorial Office.

26. Supplementary materials

All the data necessary to support the conclusions should be included with the main body of the paper. Any additional data supporting the interpretations may be included in Supplementary materials. This material may include movies, tables, illustrations, texts, and so on. Supplementary materials will be made available free of charge on the J-STAGE. Each file should be no more than 50 MB in size. Supplementary materials cannot be added after acceptance. Please cite in the text that there is a Supplementary materials. It is recommended to make a section for Supplementary materials.

27. Profile

For the review article, profiles of all authors or key author(s) can be appended. They are recommended by the Editorial Office when the manuscript is accepted for publication.

(Revised April 2025)