

Rules for submission, reviewing and publishing of scientific papers (as revised in 2025)

1. The “Applied Physics” journal is mainly intended for urgent publication of short papers concerning recent achievements in physics that have a potential of applied (technical and scientific) use. The journal is included in the new List of the Higher Attestation Commission, which came into effect on December 1, 2015.

By sending the article manuscript to the journal’s editorial board, the authors grant the editorial board, founder and publisher of the journal a free, non-exclusive right to publish it in Russian as an article in the printed version of the journal, in the electronic version of the journal in the Internet and on laser disks. At the same time the authors retain their intellectual rights to the article manuscript (including “copyright”). In this regard and considering Part Four (Section VII) of the Civil Code of the Russian Federation, the authors shall submit a letter to the editor in the following form:

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We, the undersigned, the manuscript authors _____, grant the editorial board, founder and publisher of “Applied Physics” journal a free, simple (non-exclusive) license to publish the article manuscript in both printed and electronic journal versions.

We confirm that this publication does not violate the intellectual rights of other persons or organizations. Signatures of authors: _____ (full name, academic degree, date)

The article shall be signed by all authors. If there are several authors, the name of the author responsible for message exchange with the editorial board shall be indicated. The article manuscript shall be sent to the address of the journal’s editorial board: 111538, Moscow, Kosinskaya st, 9, AO NPO Orion, editorial board of “Applied Physics” journal or by e-mail: advance@orion-ir.ru

2. The article manuscript shall be submitted to the editor only in Russian.

3. The article manuscript shall be accompanied by an expert opinion whether its publication in the open media is allowed, which shall be drawn up in accordance with the established procedure.

4. The article size (including figures, bibliography and the English-language part) shall not exceed **7 pages** of A4 format with single line spacing. (A larger article is proposed to be sent to the affiliated “**Applied Physics Advances**” journal intended for publication of detailed articles and reviews). The article material shall be submitted in printed form (on paper) and in electronic form on a CD/DVD disk with the text in Word format (font type – Times New Roman, font size – 12), and the text shall already include figures with captions under them in the proper places. However, overly detailed and cumbersome mathematical transformations and expressions should be avoided in the text. The article styling shall be as follows:

- title of the journal section;
- UDK index;
- PACS classification code (https://publishing.aip.org/wp-content/uploads/2019/01/PACS_2010_Alpha.pdf);
- article title;
- initials and surnames of authors;
- abstract of the article (10–15 lines describing the purpose of the paper and its main findings);
- keywords;
- scientific specialty code.

5. The main text of the article shall begin with the “Introduction” section clearly stating the purpose and objectives of the paper along with arguments in favor of its preparation against the background of the existing state of the problem addressed in the article. The further text of the article shall also have meaningful headings (sections and subsections) without being numbered. The article shall end with a separate section, “Conclusion,” listing the main findings, conclusions that follow from them, and, if possible, proposals for the research advance and use of its findings.

The bottom of the first page of the text shall accommodate a separate paragraph (in bold) containing contact information about the author (or authors) (**mandatory section**): surname, first name, patronymic (in full), **e-mail (of all authors)**, profiles and registration numbers in scientometric databases (SPIN code, RINTS Author ID, ArXiv Author ID, Orcid ID, Scopus Author ID), academic degree, title, position, postal address of the enterprise).

Also a person responsible for message exchange with the editorial board shall be specified.

Authors can suggest potential reviewers (2–3 people by indicating their full name, place of work, and email address). The proposed candidates shall not work in the institutions where the authors do.

The main text shall be followed by the list of references called "Bibliography".

Examples of designations of references used in the "Bibliography" section.

Articles shall be referred to as follows: Surname, initials, journal title, year, volume, issue, page numbers.

Ivanov I. I. / *Applied Physics*. 2022. No. 1. P. 12–18.

Lang D. V. / *J. Appl. Phys.* 1974. Vol. 45. No. 7. R. 3023–3034.

Reference to **books**: Surname, initials, book title, city, publisher, year. (When a specific chapter or page in a book is referred to, the page number is placed after the year.)

Korn G., Korn E. *Mathematical Handbook*. – Moscow: Nauka, 1974.

Biberman L. M., Vorobiev V. S., Yakubov I. T. *Kinetics of non-equilibrium low-temperature plasma*. – Moscow: Nauka, 1982. P. 371.

Ultraviolet technologies in the modern world / edited by Karmazinov F.V. Kostyuchenko S.V., Kudryavtsev N.N. – Dolgoprudny: Intellect, 2012.

Reference to **conference proceedings**: Surname, initials, title of publication, place and date of publication, page numbers.

Romanov A. V., Stepovich M. A., Filippov M. N. / *Proceedings of the XVII International Conference "Radiation Physics of Solids"*. – Sevastopol, 2007. P. 592–599.

Reference to **patents**: Surname, initials, title, type, number, year.

Davydov S. G., Dolgov A. N., Yakubov R. H. *Vacuum spark gap*. Patent of invention No. 2654494 (RF). 2018.

Reference to **dissertations and Abstracts**: Surname, initials, title of paper (abstract), diss. ... Candidate (Doctor) of Physics and Mathematics, city, organization, year.

Grechikhin V. A. *Development and analysis of computer algorithms for processing single-particle signals of laser Doppler anemometers*: Abstract from diss. by Candidate of technical sciences. – Moscow: MPEI, 1996.

Further, detailed English-language information about the article required for indexing the entire journal, the given article and its authors in international scientometric databases shall follow, namely: PACS, article title, authors' surname and initials (English transliteration), enterprise, its postal address, author(s) e-mail, abstract, keywords, references; since the journal is also distributed abroad, the editorial board reserve the right to correct the English part of the text without changing its meaning.

Styling of the References in the English part of the article has its own peculiarities. In particular, if the cited book or monograph is a translation into Russian from a foreign publication, the original data of this publication (authors, book title, publisher, city or country, year of publication) shall be given, as well as the Russian publisher and the year of publication in Russian. Given below are the main examples of designation of used references in the References section:

Article from the journal:

Ivanov I. I., *Applied Physics*, No. 1, 12–18 (2022) [in Russian].

Lang D. V., *J. Appl. Phys.* **45** (7), 3023–3034 (1974).

Note: if a Russian journal has a printed English analogue, the English title of the analogue shall be used and page numbers shall be taken therefrom. If there is no English analogue, the English transliteration of the Russian name shall be used.

Book:

Korn G. and Korn E., *Mathematical Handbook*. New York-London, Mcgraw-Hill Book Company, 1968; Moscow, Nauka, 1974.

Ultraviolet technologies in the modern world / ed. Karmazinov F. V., Kostyuchenko S. V., Kudryavtsev N. N. Dolgoprudny, Intellect, 2012 [in Russian].

Conference proceedings:

Romanov A. V., Stepovich M. A., and Filippov M. N. *Proc. XVII Intern. Meeting on Radiation Physics of Solid State*. Sevastopol, 2007, pp. 592–599.

Patents:

Davydov S. G., Dolgov A. N., Yakubov R. H. *Vacuum spark gap*. Patent for invention No. 2654494 (RF). 2018.

Dissertations and Abstracts:

Grechikhin V. A. *Development and analysis of computer algorithms for processing single-particle signals of laser Doppler anemometers*: Abstract. Diss. Candidate of Technical Sciences. M., MEI, 1996.

6. The list of references ("References") shall correspond to all references to external sources used in the text of the article. These references shall be enclosed in square brackets, for example, [1–3], [7, 8]. Internal references, i.e. references to formulas, figures and tables of the article shall be enclosed in round brackets, for example, formula (3), equation (1), (Fig. 2), (Table 3). Any references in figure captions or in the figures are not recommended.

7. The number of figures and photos for a typical article shall not exceed 4. If one figure contains two, three or more variants of graphic (or photo) images of the type “Fig. 2a”, “Fig. 2b”, etc., each individual variant is considered as a separate figure. If the above limit number of figures (photos) is exceeded, the article is sent back to the authors for revision. Graphics (black and white and color) shall be put directly in the proper place in the article and in the proper scale. Next to the graph axes, the displayed physical quantities shall be indicated only (**strictly!**) using symbols (letters), and after a comma - the quantity dimension in Russian (in direct font). It is recommended to number different curves on graphs, even if they are identified by a different color or line type. Graphs shall be submitted only (**strictly!**) against the white background. Auxiliary grids are not allowed in the graph area.

8. Captions under the corresponding figures shall be out in the proper places in the text. Each caption shall be as short as possible, but meaningful in terms of its content. Any physical (technical) symbol included in the caption shall have its verbal explanation there.

9. Simple formulas shall be included in the text in the format of the text editor used; more complex formulas shall included using MathType formula editor. Standard mathematical notations (e.g. max, log, sin, exp, etc.) shall be typed directly. The same is true about figures and numbers. Formula numbers shall written in parentheses on the right. To indicate non-vector physical (technical) quantities using symbols, use only the Latin and Greek alphabets, while using a straight font for Greek letters, and an oblique font (italics) for Latin letters in the text. Vectors and matrices shall be marked by a bold, upright font (preferred) or an arrow above the italic vector symbol (less preferred). For subscripts and superscripts, use Arabic numerals, Latin or Greek letters, but if the index, usually a subscript, is a short (abbreviated) form of the Russian characteristic word, it is allowed to use Russian letters in its designation (uppercase font), for example U_{in} , I_{out} , v_{gr} , etc. The dimension of physical quantities shall be always given only in Russian, using an uppercase font.

10. Tables shall be made in accordance with the following requirements: the top line contains the data name and dimensions; the following lines contain the data itself.

11. Formulas, tables and figures shall have their own separate continuous numbering system. If there are no additional (return) references to a specific formula in the text or it is used only once, it shall not be numbered. A table and/or a figure used only once do not require numbering either.

12. Manuscripts and CD/DVD will not be sent back by the editorial board.

13. Authors (or an author) of each article after it is published in a journal issue have a right to receive an electronic version of the article in PDF format (Adobe Acrobat editor) from the editorial board.

14. When published in the journal, each article is accompanied by a footnote with the copyright symbol © placed before the author's name (authors' names). The article shall also specify the date the article was received by the editorial board.