

# **Guidelines for Authors of *Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques***

## **I. GENERAL**

*Journal of Surface Investigation* publishes papers with original results of theoretical and experimental research on topical problems of solid state physics, materials science, experiment engineering, condensed matter physics, nanostructures, and study of surfaces of thin films and interfaces:

1. Geometric and energy structure of surfaces, methods of computer simulation.
2. Physical and chemical properties and their change under radiation or other effects.
3. Techniques for studying the surface, films and near-surface regions of crystals:
  - X-ray diffraction and X-ray spectroscopy;
  - Application of synchrotron radiation;
  - Neutron diffraction;
  - Radiographic analysis;
  - Electron microscopic analysis;
  - Scanning tunneling microscopy;
  - Atomic force microscopy.

Preference is given to manuscripts devoted to the development of methods and instruments for structural studies. Besides manuscripts containing original results, reviews on the theory of condensed matter, the simulation of the properties of materials, the transport theory, and the scattering of radiation of various type and particles in matter can be published by prior agreement with the editorial board.

**Articles from citizens of any country** in Russian and English are accepted. Articles should contain no more than 25 pages of text; they may include 7 figures, 5 tables, and at least 20 references. Reviews should contain no more than 50 pages of text and may include 9 figures, 5 tables, and at least 90 references. Short messages should be no longer than 4 pages of text and may include 3 figures and 2 tables.

**The manuscript submitted should comply with the publication ethics rules:**

<https://www.pleiades.online/ru/authors/publication-ethics/>;

<https://www.pleiades.online/ru/journal/surfinv/sub/>.

**The author guarantees** that the corresponding text (original or translated into other languages or from other languages) have never been published and is not under consideration for publication elsewhere.

**The author ensures a novelty of the results.** In particular, the author has to search the Internet for similar works (in Russian and English) and include relevant references.

**The full content of the journal issues**, the forms of contracts, and other information about the journal can be found on the journal websites <http://www.pleiades.online/ru/journal/surfinv/sub/>; <https://www.sciencejournals.ru/>; <http://www.issp.ac.ru/journal/surface/>; <https://www.sciencejournals.ru/list-issues/poverh/>; <https://www.springer.com/journal/11700>; <https://www.pleiades.online/ru/journal/surfinv/sub/>.

**Electronic versions of articles** published in the journal can be found at <https://elibrary.ru/>.

The editorial board decides whether the manuscript should be accepted, considering the submitted manuscript itself, a cover letter from the organization, an expert evaluation, a License Agreement for the Russian version, and a Copyright Transfer Agreement for the English version, respectively, with the Russian and foreign Publishers of the journal. The forms of agreement (Word, doc, docx) are completed in a computer, signed by all the authors (clear electronic signatures on a white background are allowed), and submitted to the editorial board in electronic format \*.doc (\*.docx) or as separate multipage PDF files. The copyright transfer agreement does enter into force in the case and since the manuscript is accepted for publication.

**To simplify the procedure for interaction between the author (co-authors) and the Editor, the Copyright Transfer Agreements (in Russian and English) should be sent to the editorial board simultaneously with the manuscript.**

The editorial board asks authors to name 2–3 possible reviewers of their work.

**The manuscript and accompanying documents are simultaneously e-mailed to the editorial board by [surf@crys.ras.ru](mailto:surf@crys.ras.ru) and the manuscript is submitted using the AUTHOR PORTAL at <https://publish.sciencejournals.ru/login> (register, select journal *Surface. X-ray, Synchrotron and Neutron Research*, and then follow the instructions) or the manuscript is submitted using the journal website <https://www.sciencejournals.ru/journal/poverh/>. Files of the manuscript and the enclosed documents should be collected into one archive file (ZIP). Large files (for example, original illustration files) can be transferred separately as packed ZIP files (or divided into several ZIP files). Upon receiving the manuscript, the editorial board notes authors within one business week.**

**Reviewing: All manuscripts submitted for publication undergo external single-blind peer review.**

**The manuscript returned to authors for revision** should be resubmitted within one month. After this period, the manuscript is considered a new submission. A letter from the authors, describing the corrections made and giving responses to all comments from the reviewer, should be attached to the revised manuscript.

**After the manuscript is accepted** for publication, the author cannot make substantial changes and additions to the text. After publication, the author receives a copy in PDF format.

The editors keep the right not to enter into correspondence with the author regarding the reasons for refusing to publish the manuscript.

**Reproduced data;** see details at <https://www.pleiades.online/ru/authors/permission/>. The authors should obtain permission for any data (fragments of text, tables, figures, diagrams, function graphs, photographs, etc.) borrowed from other works; the permission is submitted together with a manuscript. The editors, in turn, attach copies of these permissions to the manuscript sent to the publisher for publication.

If an author puts his data on the same chart with the data of other works, making a completely new chart, then this is a citation. No permission is required; the reference is needed.

If an author compiles many data from other works from different sources and puts them on one chart, then this is new information; it is also considered a citation. No permission is required; references are needed.

Tabular data can be visualized as a figure, and figures can be represented as tables; these are a new way of presenting the information. These data are not considered borrowed. Therefore, no permission is required; the reference is needed.

It is allowed to describe the data in the figure in words in the text and include a reference to the figure.

If the figures are borrowed from *Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques*, permissions are not required, as when borrowing from any journals that Pleiades publishes in English).

## II. MANUSCRIPT STRUCTURE

The manuscript should include the following elements:

- 1. Title**, specific and informative;
- 2. List of all authors** (initials and surnames);
- 3. Affiliations of the authors:** full (without abbreviations) name of institution, its postal address, city, country, and zip code. If there is more than one affiliation, make clear the matching between each surname and the corresponding address;

**4. Abstract.** The abstract should not be too short and should not contain references to other publications. The abstract should be informative and detailed; it should describe the techniques and main results of the study. It should be clear from the abstract what issues were addressed in the research and what answers were obtained. An example of abstract formatting is given below in APPENDIX.

**5. Keywords** should contain 10–12 words or short phrases that accurately reflect the content of the manuscript but, if possible, not repeat its title.

**6. Body of the text.** When preparing the manuscript, the authors should maintain the uniformity of terms. The same entities should not be given different names. The authors should use notation, units of measurement, and nomenclature consistently throughout the manuscript.

**The main text of the manuscript** is submitted in Microsoft Word (doc, docx) format for Windows 8–10 and later.

**The manuscript** should be typeset using a computer, using a 14-pt font with 1.5-line spacing (including references, abstract, and figure captions). The margins of the left, top, and bottom should be 25 mm; and on the right, it should be 15 mm. All pages should be numbered. The quotation marks in the text are typed “ ”.

An example of the initial (first) page of a manuscript is given below in APPENDIX.

**Physical units and designations in the International System of Units (SI)** and the relative atomic masses of elements in a scale of  $^{12}\text{C}$  should be used in the manuscript. In calculation works, the authors of the programs used should be specified. The IUPAC nomenclature is used to name chemical compounds.

**Abbreviations should be avoided** whenever possible, except for commonly used ones. If used, they should be explained upon the first mention.

It is recommended to **standardize the structure of the manuscript**, using subtitles INTRODUCTION, THEORETICAL ANALYSIS, METHODS, EXPERIMENTAL, RESULTS AND DISCUSSION, CONCLUSIONS, and FUNDING. All financial sources should be indicated in the FUNDING section. **Example:** This work was supported by the Russian Foundation for Basic Research (project no. XX-XX-XXXX-a). The work was carried out as part of the XXXX research program planned at the XXXX University. Author X.X.X. is supported by grant XXXX of the Ministry XXXX. In the same section, authors can express their gratitude, report on the use of collective use centers, specify the contributions of individual authors to the study (if necessary), and give any information that may affect the understanding and assessment of the content of the manuscript.

**Authors should disclose information about conflicts of interest;** see details at <https://www.pleiades.online/ru/authors/guidelines/ethics-statements/>; <https://www.springer.com/gp/editorial-policies>; <https://www.springer.com/gp/editorial-policies/citations/>.

**A conflict of interest** is any relationships or spheres of interest that may directly or indirectly influence or bias the work.

**Example:** Conflict of interest: Author X.X.X. owns shares of Company Y mentioned in the manuscript. Author Y.Y.Y. is a member of Committee XXXX (a member of the editorial board is required to indicate that he/she is published in the journal, where he/she is a member of the editorial board and that this is the conflict of interest).

**If there is no conflict of interest, the authors should state**

**Conflict of interest:** The authors declare that they have no conflict of interest.

**When foreign surnames are mentioned**, their original spelling must be given in parentheses, except for well-known ones, for example, found in the encyclopedia, and also if these foreign surnames are referenced.

**When mentioning foreign educational institutions**, firms, branded products, etc., their names in the original spelling should be given in parentheses. If there are citations of other works in

the article, the citations are enclosed in quotation marks, given in the original language of the work, indicating its author.

**7. The corresponding author** should be indicated on the last page of the article, including his/her full name, mobile, home, and office phone numbers, and e-mail. If there are several authors, it is desirable to specify the e-mail addresses of two or three authors, who regularly check the received messages.

**8. Formulas** must be prepared according to the following requirements:

(<https://www.pleiades.online/ru/authors/guidlines/prepare-electronic-version/text/>)

Embedded formulas and equations must be created in the Word built-in formula editor; the Equation program is allowed. Signs \*, ', ±, single Greek letters, single italic or bold letters, single variables or designations that have only a superscript or only a subscript, units of measure, numbers in the text, and simple mathematical or chemical formulas (for example,  $L_1 = f \times L_0 / (L_0 - f)$ ; NaGdF<sub>4</sub>:Eu<sup>3+</sup>) should be typed in text mode without using embedded frames (without using Equation, MathType, etc.). A period should be used as a decimal separator, for example, 0.14.

(a) All the formulas and letter symbols should be typed in a computer with all the features of the text (indexes, Bold, Italics, etc.). When writing **fractions**, use a **slash** as a sign of division. It is advisable to avoid the sign of root, replacing it with a fractional exponent. **The exponential function** should be written in line as  $\exp(-2pE)$ ;

(b) **Physical quantities** should be typed in italics: *x, y, z, h, r, k, l, H, S, P, R, L, T, E, V*, etc.;

(c) **Greek characters** should be typed upright:  $\nu, \mu, \omega, \varphi, \beta, \delta, \pi, \lambda, \alpha, \Delta, \vartheta, \theta$ , etc.;

(d) **Vectors** and **matrices** should be set in bold and upright; omit the arrows above the symbols: **B, C, r, g**, etc.;

(e) **Mathematical symbols** like log, tan, sin, cos, zero (0), max, min, and exp and chemical elements and formulas (Ba, Na, Ca, Fe, H<sub>2</sub>O, NaHPO<sub>2</sub>, etc.) should be set in Roman type;

(f) Abbreviations of words **in subscripts and superscripts** of formulas and physical quantities should be given upright without a point at the end and without brackets:  $T_{\min}, T_{\max}, \theta_B$ , etc.

**9. List of references.** The list should include at least 20 references and should adequately reflect the state-of-art of the field of study. The cited articles should be accompanied by their doi information.

Authors should consider the following guidelines when preparing the manuscript:

- Any statement in the manuscript based on external sources (that is, not on the authors' new ideas, conclusions, or general knowledge of the authors) must contain a quotation, enclosed in quotation marks, and a relevant reference.
- Authors should avoid quoting derivatives of the original work. For example, they should cite the original work, not a review article that cites the original work.
- Authors must ensure that their citations are accurate (that is, the citation supports the statement made in their manuscript and must not misrepresent another work by citing it if it does not support the authors' point of view).
- Authors should not cite sources they have not read.
- Authors should not preferentially cite their articles or publications of their friends, colleagues, or institutions.
- Authors should avoid citing works from only one country.
- Authors should not use excessive citations to support a single point.
- Ideally, authors should cite peer-reviewed sources whenever possible.
- Authors should not refer to advertisements or promotional materials.

The list of references must include accessible sources; see detail at

<https://www.springer.com/gp/editorial-policies/citations>. **An example of the list of references is given below in APPENDIX.**

**10. Tables** are typed on separate pages after the list of references and numbered in Arabic numerals in order of their mention in the text. The number must be followed by the heading of the table and the table itself. Each column in a table and tables themselves should have headings and be separated by vertical lines.

**11. Illustrations** should be placed at the end of the manuscript on separate pages. Each figure should have a caption (standing away by 2–3 cm) containing the figure number, the surname, and initials of the first author, and the short title of the journal (for example, Fig. 1. I.P. Ivanov, *Journal of Surface Investigation*). If there are several pieces in one figure, they should be arranged sequentially and have a common caption. An example of figure formatting is given below in APPENDIX.

**Figures** are presented in the form of an original image (the submission of photocopies is not allowed) not less than  $6 \times 8$  cm and no more than  $10 \times 16$  cm in size (with an indication of the bottom and top) with a resolution of at least 300 dpi (dots per inch).

**Line or halftone illustrations** may be presented in formats JPG, PNG, JPEG, GIF, PDF, TIFF, or in the format of the program in which they are made. The resolution of illustrations should be at least 300–600 dpi (dots per inch).

Inscriptions in the figures should be typed according to the text (at least 14 pt). To explain the details of the figure, it is recommended to use digital or lettered symbols, explaining them in the caption. Explanatory inscriptions and formulas in the figure itself are undesirable.

**Photographs** should be no larger than  $9 \times 12$  cm, with a resolution of at least 600 dpi.

It is necessary to give references to all the tables and figures: the place where a figure or a table is mentioned for the first time should be marked on the left margins of the manuscript.

In the absence of at least one of the above elements, the manuscript may be rejected without consideration on the merits.

**12. The article is drawn up according to the model:** title, authors, the full name of the institutions in which the research was carried out and their postal addresses, and date of receipt.

## APPENDIX

### 1. Example of the initial (first) page of the manuscript

#### Local Atomic and Electronic Structure of $\beta$ -CoOOH Nanosheets for Hydrogen Evolution Reaction

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Received XX. XX. XXXX;

revised \_\_ \_\_ \_\_\_\_;

accepted \_\_ \_\_ \_\_\_\_

**Abstract**— Text (150–250 words).

**Keywords:** 10–12 words or phrases

Then, the following parts should be composed in order: text of the article, list of references, tables, list of figure captions, and figures.



7. G. Benayoun, PhD Thesis (Univ. Joseph Fourier, Grenoble, 2001).
8. K. Takhira, T. Hayakawa, and T. Isikawa, JPN Appl. No. 58-144345 (1984).
9. W. J. Thompson and D. R. Albert, US Patent No. 7430020 (3 March 1975).
10. G. Kazakevich, A. Burov, C. Boffo, P. Joireman, G. Saewert, C. W. Schmidt, and A. Shemyakin, Preprint FERMILABTM-2319-AD (2005).  
<http://lss.fnal.gov/archive/test/tm/2000/fermilab/tm/2319/ad.pdf>.
11. A. K. Geim and I. V. Grigorieva, Van der Waals heterostructures.  
<http://arxiv.org/ftp/arxiv/papers/1307/1307.6718.pdf>.

**Note:**

1. If there are more than four authors, it is necessary to give the names of all authors:  
R. B. Morgunov, O. V. Koplak, V. P. Piskorskii, D. V. Korolev, R. A. Valeev, and A. D. Talantsev, J. Magn. Magn. Mater. **497**, 166004 (2020). doi 10.1016/j.jmmm.2019.166004
2. The same rule is for editors:  
*The Chemistry of Petroleum Hydrocarbons*, 3 vols., Ed. by B. T. Brooks, C. E. Boord, S. S. Kurtz, and L. Schmerling, (Reinhold, New York, 1954).

**Databases and sites of organizations.**

The name of the database or organization is indicated instead of the author name, and the organization or site are given at the end, respectively.

**Примеры:**

1. Healthwise Knowledgebase, US Pharmacopeia (Rockville, 1998). <http://www.healthwise.org>. Cited September 21, 1998.
2. ISSN International Centre, Global ISSN database (2000). <http://www.issn.org>. Cited February 20, 2000.

## **5. How to handle a digital proof.**

After the manuscript is transferred to the production, the author receives a test e-mail to verify his/her email address, the article layout to make the necessary corrections, and, ultimately, the final version of the article. All letters must be answered without changing the subject, even if there are no comments or corrections.

Instructions on making corrections will be sent to the author together with a covering letter. Do not change the names of PDF files after editing. For more information on the requirements for making corrections, see <http://pleiades.online/ru/authors/>.

## **6. Illustrations.**

- 1. Figures should not contain frames** (there should be only axes), grids, or intermediate scale marks on the axes (except for a logarithmic scale). The scale marks should be turned inside the picture. The thickness of the lines in the figures must be at least 0.5 mm.
- 2. Use one of two variants of the axis labels:** (1) the abscissa axis is labeled under the scale on the right, and the ordinate axis is labeled above the axis; (2) the abscissa axis is signed in the middle under the scale, and the ordinate axis is labeled in the middle to the left of the scale, the inscription is rotated 90°. The authors should unify the method of drawing up graphs throughout the manuscript.
- 3. Units of measurement** (upright type) should be separated from physical quantities (italics) with a **comma** (*I*, a.u.; *z*, nm); no period after the units of measurement is used (except for at. %, vol. %, u. (unit)). Abbreviations of units of measurement: minute, min; second, s; degree, deg; hour, h; arbitrary units, a.u., degree Celsius, °C, degree Kelvin, K; mol %; wt %.

**4. If a large (or small) order of magnitude** is presented, then do not use E notation: *e.g.*, 5.28E+08 should be written as  $5.28 \times 10^8$ . The multiplier (order of magnitude) should be indicated in the axis title before the units of measurement, and not next to the interval (tick) marks, for example:  $t, 10^{-3}$  s;  $P, 10^9$  Pa.

**5. The figure should be minimally loaded** with information. Curves and regions are best denoted with numbers (italics). All necessary information and explanations should be given in the figure caption.

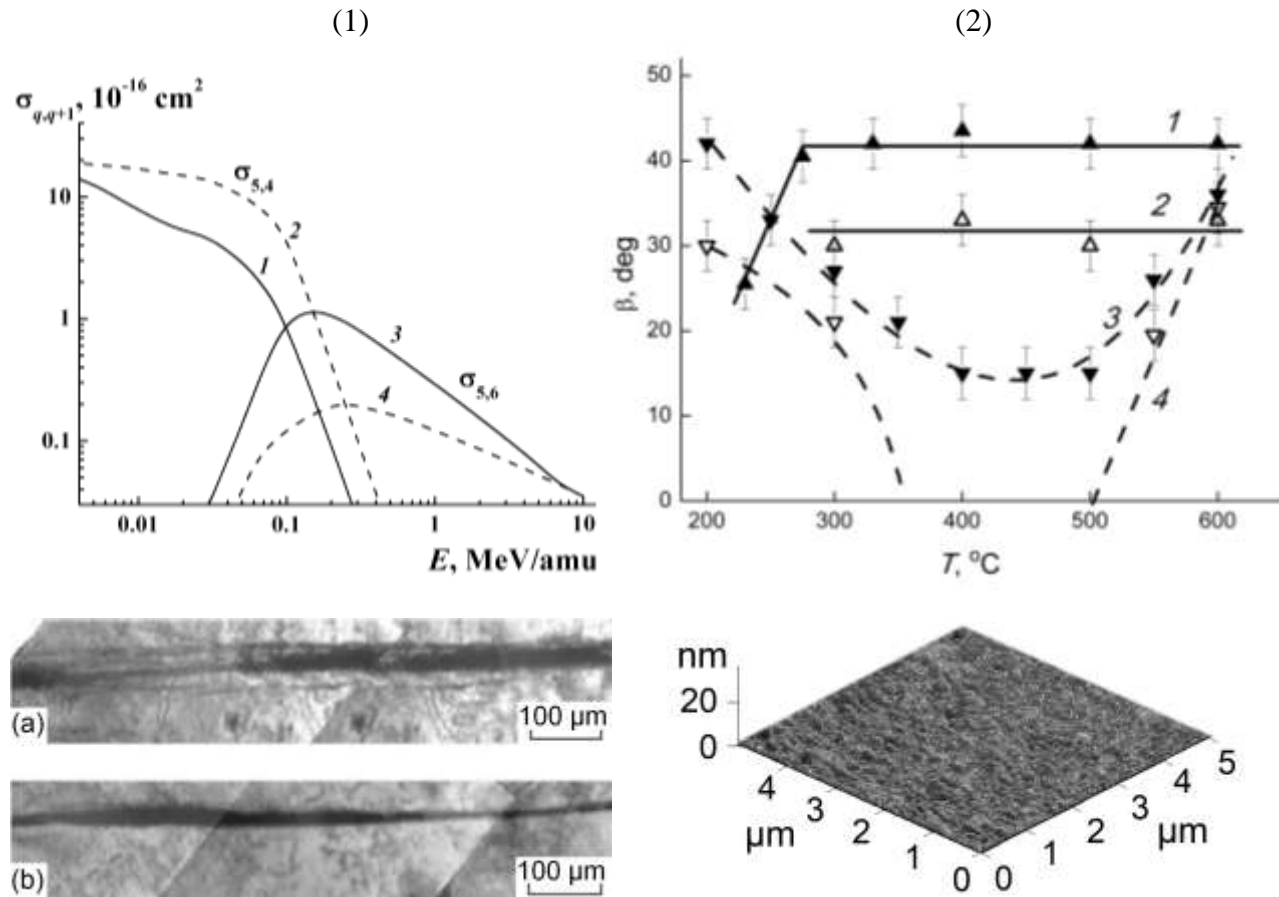
**6. All decimal numbers must be typed with a period, i.e. 25.7.**

**7. Examples of figures:**

Fig. 1

Table 1

It is necessary to give references to all the tables and figures: the place where a figure or a table is mentioned for the first time should be marked on the left margins of the manuscript.



If you have any questions, please contact the editorial board by phone +7 (499) 743-00-32, +7 (916) 188-71-41 e-mail: surf@crys.ras.ru.