

The rules of article design

The editorial staff accepts manuscripts in Russian and English that are not published and not intended for publication in another edition.

The article should contain the following sections in Russian and English:

- UDC (only in Russian);
- MSC2020 (only in English);
- article title;
- affiliation of the author(s);
- information about every author(s);
- abstract;
- keywords;
- text of the article (in English);
- references.

UDC. The Universal Decimal Classification (UDC) is a system for classifying information widely used all over the world to systematize works of science, literature and art, periodicals.

MSC2020 codes The Subject Classification Index (MSC 2020) by AMS is used for thematic link separation in two abstract databases – the Mathematical Reviews (MR) of the American Mathematical Society (AMS) and Zentralblatt MATH (zbMATH) of the European Mathematical Union. The directories of MSC 2020 codes can be downloaded from the **Useful Materials** section of the **For Authors** section of the journal website.

The UDC and MSC2020 codes can be downloaded from the **Useful materials** section of the **For author** menu on the journal's website.

Affiliate author(s): the name of the organization at the place of main work or organization where the research was carried out, city, country.

Information about the author(s). The section contains the following information for each author:

- a) Surname, First name, Patronymic (for the section in Russian); First name, P., Surname (for the section in English);
- b) Position, Department (indicated if available);
- c) the affiliation of the author: the name of the organization at the place of the main work or organization where the research was conducted;
- d) the postal address is indicated in the form: postcode, country, city, street, house (in Russian) and house street, postcode, country (in English);
- e) academic degree (indicated if available);
- f) ORCID. To obtain an ORCID, you must register at <https://orcid.org/>.
- g) email of the author.

Abstract should be clearly structured, the material presentation should follow the logic of the result description in the article. The text should be concise and clear, free from background information, and have convincing wording.

bf The volume of annotations in Russian and English should be on average bf from 150 to 250 words.

It is recommended to include in the abstract the following aspects of the article's content: the subject, purpose of the work, method or methodology of the work, the results of the work and the scope of their application, conclusions.

The subject and purpose of the work are indicated if they are not clear from the title of the article; the method or methodology of the work should be described if they show some novelty or they are of interest from the point of view of this work.

Units of physical quantities should be given in the international SI system. It is allowed to give the value of the physical quantity in original system of units in parentheses next to its value in the SI system.

The abstract should not contain references to the publication numbers in the article's bibliography.

When writing annotations author(s) should remember the following points:

- it is necessary to follow the article's chronology and to use its headings as a guide;
- do not include non-essential details;
- use the technical (special) terminology of your scientific area, clearly expressing your opinion and bearing in mind that you write for an international audience;
- the text should be connected by the use of words «consequently», «moreover», «for example», «as a result», etc., or separate statements should logically follow from one another;
- it is better to use active voice rather than passive, i.e. «The study tested», but not «It is tested in this study».

Keywords. The keywords that make up the semantic core of the article are a list basic concepts and categories that serve to describe the problem under study. These words serve as a guide for the reader and are used to search for articles in electronic bases, therefore, should reflect the discipline (the field of science within which the article), topic, purpose and object of research.

As keywords, both single words and nominative and singular phrases. Recommended the number of keywords – 5-7 in Russian and English, the number of words within a key phrase - no more than three.

Text of the article. When presenting the text of the article, it is recommended to adhere to the following structure.

– *Introduction.* In this section, you should describe the problem with which the research is connected; review the literature on the research topic; indicate the problems, the solution of which is not known today and the solution of which this manuscript is devoted to; to formulate the goals and objectives of the study, as well as to show their novelty and practical significance.

– *Theoretical foundations, methods of solving the problem and accepted assumptions.* This section details the general design of the study, detailing the methods and approaches that were used to obtain the results.

When using standard methods and procedures, it is best to refer to relevant sources, remembering to describe modifications of standard methods, if any. If you use your own new method, which is still has not been published anywhere before, it is important to give all the necessary details. If previously the method was published in a well-known journal, you can limit yourself to a link.

– *Results.* This is the main section that sets out the author's original material containing theoretical or experimental data obtained in the course of the research. In terms of volume, this part is central to the scientific article.

The results of the study must be described in sufficient detail, so that the reader can trace its stages and assess the validity of the conclusions made by the author.

The results, if necessary, are confirmed by illustrations - tables, graphs, figures, which present the original material or evidence in a collapsed form.

If the manuscript is of a theoretical nature, then this section provides mathematical calculations with such a degree of detail that a competent specialist can easily reproduce them and check the correctness of the results obtained.

– *Discussion and analysis of the obtained results and their comparison with the previously known ones.* This section contains the interpretation of the obtained research results, assumptions about the obtained facts, comparison of the obtained results with the results of other authors.

– *Conclusion.* The conclusion contains the main ideas of the main text of the article. It is recommended to compare the results obtained with those that it was planned to receive. At the end, conclusions and recommendations are given, and the main directions for further research in this area are determined.

- *Thanks.* In this section, it is customary to express gratitude to colleagues who assisted with research or criticized your article. The sources of research funding (grant, state assignment, state contract, scholarship, etc.) are also indicated.

References formatted according to the citation style adopted for use in mathematics *American Mathematical Society* (*American Mathematical Society*) and *European Mathematical Society* (*European Mathematical Society*). To do this, use the AMSBIB format, implemented in the `svmbib.sty` style package. This package is developed based on the `amsbib.sty` package.

References should contain only those sources that are referenced in the text of the work. Sources are arranged in the order of their mention in the article and their number should not exceed 20.

Description of the bibliographic reference schemes for the References section.

Articles in the journal in Russian:

- Author(s) (transliteration);
- Parallel title of the article in English (without square brackets) or [translation of the title of the article in English (in square brackets)];
- The name of the Russian-language source (transliteration);
- [Translation of the source name into English – paraphrase (for journal one may not do it)];
- Output data with notation in English, or only digital (the latter, depending on the description standard used);
- An indication of the article language (in Russ.) after the article’s description.

Books (monographs and collections) in Russian:

- Author(s) (transliteration);
- title of the book (transliteration);
- [Translation of the book’s name in square brackets];
- Imprint: place of publication in English – Moscow, St. Petersburg; English name of publishing house if it is an organization (Moscow St. Univ. Publ.) and transliteration, if the publisher has its own name, indicating in English that it is a publisher: Nauka Publ.;
- The number of pages in the book;
- Reference to the language (in Russ.) after the description of the book.

For transliteration of the Russian alphabet in Latin it is necessary to use the BGN (Board of Geographic Names) system. On the website <https://translit.ru/ru/bgn/> you can use the program of transliteration of the Russian alphabet into the Latin alphabet for free.

Examples of bibliographic references for the section *References*.

Journal articles in Russian.

a) there is no parallel name in English:

P. A. Shamaev, “[On the local reducibility of systems of differential equations with perturbation in the form of homogeneous vector polynomials]”, *Trudy Srednevolzhskogo matematicheskogo obshchestva*, 5:1 (2003), 145–151 (In Russ.).

b) a parallel name in English is available:

P. A. Shamaev, “The branching of periodic solutions of inhomogeneous linear differential equations with a the perturbation in the form of small linear term with delay”, *Zhurnal Srednevolzhskogo matematicheskogo obshchestva*, 18:3 (2016), 61–69 (In Russ.).

Journal articles in English:

M. J. Berger, J. Olinger, “Adaptive mesh refinement for hyperbolic partial differential equations”, *Journal of Computational Physics*, 53 (1984), 484–512.

Articles in the electronic journals in Russian:

M. S. Chelyshov, P. A. Shamaev, “[An algorithm for solving the problem of minimizing a quadratic functional with nonlinear constraints by the method of orthogonal cyclic reduction]”, *Ogarev-online*, 20 (2016) (In Russ.), Available at: <http://journal.mrsu.ru/arts/algorithm-resheniya-zadachi-minimizacii-kvadraticnogo-funkcionala-s-nelinejnymi-ogranicheniyami-s-ispolzovaniem-metoda-ortogonalnoj-ciklicheskoj-redukcii>

Articles in collections in Russian:

A. V. Ankilov, P. A. Velmisov, A. V. Korneev, “Investigation of pipeline dynamics for delay of external influences”, *Prikladnaya matematika i mekhanika* [Applied Mathematics and Mechanics], 10, UIGTU Publ., Ulyanovsk, 2014, 4-13 (In Russ.).

Books (monographs and collections) in Russian:

B. F. Bylov, R. E. Vinograd, D. M. Grobman, V. V. Nemyitskiy, *Teoriya pokazateley Lyapunova i ee prilozheniya k voprosam ustoychivosti* [The theory of Lyapunov exponents and its applications to stability problems], Nauka Publ., Moscow, 1966 (In Russ.), 576 p.

Conference proceedings in Russian:

P. A. Shamanaev, “[On the question of the perturbation of a linear equation by two small linear terms]”, *Mezhdunarodnoy konferentsii po differentsial’nym uravneniyam i dinamicheskim sistemam* [International Conference on Differential Equations and Dynamical Systems], *Tezisy dokladov* [Abstract] (Suzdal, 6-11 July 2018), 218-219 (In Russ.).

Detailed technical instructions on the design of manuscripts are contained in the **Rules for the layout of manuscripts in the LaTeX system.**