

Guidelines for Authors of Journal of Analytical Chemistry

GENERAL

Journal of Analytical Chemistry publishes original, yet not published, theoretical and experimental papers on all aspects of analytical chemistry. The journal also publishes reviews, feature articles, and letters to the editor.

The decision about publication of a manuscript is made based on peer reviews, which make a judgment on the novelty and importance of the results. Manuscripts describing the use of known analytical procedures or minor improvements in such procedures for analyzing new types of samples are not accepted. The manuscripts will be published if the proposed innovations offer evident advantages over earlier procedures. Authors must show how their findings compare to previous ones.

If the peer reviews are positive but contain remarks or suggestions, the editors return manuscripts to the authors for revision along with the reviewer's remarks. The authors should address each of reviewer's remarks. Upon obtaining a revised manuscript, the editorial board either accepts or rejects it. If it is rejected, the editors will send peer reviews, extracts from them, or an explanatory statement to the authors. The editorial board does not discuss rejected manuscripts with authors, except for cases of obvious misunderstanding.

Review articles are solicited by the editorial board or prepared on the author's initiative. In the latter case, the authors must send to the editors a proposal together with a summary of the review, indicating the approximate length of the review and projected number of references, which should be approved by the editorial board.

SUBMISSION

As from January 2017, the manuscripts are submitted via the electronic submission system (<http://www.zhakh.ru/AuthorArea>). New users will be prompted to register. After submission, the authors will be able to check the manuscript status in the electronic system. More complete instruction on submission of new manuscripts can be found at http://www.zhakh.ru/Guidelines/2016_GuidelinesSubmissionEng.pdf.

PREPARATION OF MANUSCRIPTS

The manuscript should be accompanied by Copyright Transfer Agreement signed by all the authors. The link to the agreement forms is provided at the submission page (<http://www.zhakh.ru/AuthorArea>); the same forms can also be downloaded from pleiades.online or www.zhakh.ru.

The manuscript must be carefully edited. The data should be presented concisely. The length of a manuscript usually should not exceed 25 typewritten pages; for a review article, 50 pages. This includes text, tables, list of references, figure captions, and figures (graphs, photos, charts, diagrams, histograms, etc.), usually no more than 6 per manuscript.

The manuscript should be organized in the following order:

- Title;
- List of authors;
- Affiliation (if the authors have different affiliations, they must use corresponding superscripted numbers following an author's surname and preceding the organization);
- Complete mailing addresses of the authors (including postal code, city, street, and number; for universities, faculty or department should be given);

- e-mail address of the corresponding author;
- Abstract (no more than 150 words; should contain the maximum number of keywords characterizing the substantive part of the paper);
- Keywords;
- Text of manuscript (the editorial board recommends standardizing the structure of the presented material in the following order: INTRODUCTION covering the state of the art and the aim of the work; EXPERIMENTAL describing all reagents, instruments, experimental procedures, etc.; RESULTS AND DISCUSSION; CONCLUSIONS);
- Figure captions;
- Tables;
- References;
- Figures.

REQUIREMENTS ON THE TEXT

These are general requirements for preparation of the text; the detailed instructions on formatting the material are given at the end of the document (PREPARATION OF ELECTRONIC VERSION). International System of Units (SI), the relative atomic weights of elements in the C scale, and IUPAC recommendations should be used. Authors should give references to the software used and its creators.

For convenience of peer review and working with the manuscript, the margins on each page should contain line numbers (in the MS Word choose menu Page Setup—Line Numbers—Restart Each Page). Authors should mark places of first mention of figures and tables by putting the number in a box in the margin (MS Word menu Insert—Text box). Variables should be italicized and the names of chemical elements given in plain type.

Axes in graphs should be designated using the following format: parameter name (name from the capital letter or italicized Latin letter), comma, unit of dimension. For example, Time, min or *t*, min, and also Intensity, arb. units. Curves in the graphs should be numbered by italicized numbers, usually clockwise.

Structural chemical formulas and schemes should be given in the places they appear in the text. Numbered equations should be printed as a new paragraph and equation numbers should be given near the right-hand margin. Only equations mentioned in the text are numbered.

The list of references should not include unpublished works. Citations in the text should be given as inline numbers in square brackets. References should be numbered in the order they are mentioned in the text.

MANUSCRIPT REVISION

When the manuscript is sent to the authors for revision, the date of submission remains unchanged within no more than three months. Otherwise the returned manuscript is considered newly submitted.

For acquaintance with the paper prepared for printing, the publishing house sends proofs to the authors by e-mail. The proofs should be read and promptly returned to the publisher by e-mail. All corrections in the proofs should be clear. The necessary explanations should be given in a separate file.

When paper is printed, the authors receive its electronic version as a *.pdf file.

PREPARATION OF ELECTRONIC VERSION

The manuscript should be presented as MS Word (*.doc, *.docx) or *.rtf file, page size A4 with all margins of 2.5 cm, double spacing, Times New Roman font, point size 12. Pages of manuscripts should be numbered throughout at the center of the top margin, including tables, figure captions, and list of references. The first page should not be numbered.

Use paragraph indentation or tabulation. Decimals should be typed with a period, not a comma (e.g., 0.25). Automatic footnotes, auto hyphenation, lists, auto indentation are welcome.

Signs *, ', ±, Greek letters, single variables or designations having only superscripts or only subscripts, units of measure, numbers in the text, and also simple mathematical or chemical formulas (for example, $a_2 + b_2 = c_2$, H_2SO_4) should be typed in the text without using embedded objects (Equation, MathType, etc.).

Initials and surname are separated with a space: A.A. Ivanov (except for author names in the paper title, where there is also a space between initials: A. A. Ivanov). A period does not follow the title of the paper, authors, addresses, all headings and subheadings, table captions, or units of measure (*s* for second, *g* for gram, *min* for minute, etc.). Periods do follow all footnotes, notes to tables, figure captions, abstract, abbreviations (m.p. for melting point), but not subscripts (T_m for melting temperature, $T_{ph.t}$ for phase transition temperature, etc.).

EQUATIONS

Mathematical equations (in a separate line) should be entirely typed using the MathType function. Composing equations of different components (one part as table, another as text, and part as inserted object) is not permitted.

For equations prepared in MathType, use general recommendations for fonts, symbol sizes, and their arrangement. Their manual change for individual symbols or elements of equations is not allowed.

ABBREVIATIONS

Abbreviations of several words are separated by spaces (760 mm Hg) except for the most common ones (e.g., i.e.). Abbreviations or formulas of chemical compounds used as adjectives are not hyphenated: IR spectroscopy, PE film, OH group.

UNITS OF MEASURE

Units of measure are separated from numerals by a space (100 kPa, 77 K, 10.34 A), except for degrees, percent, permille: 90°, 20°C, 50%, 10‰. For complex units of measure consisting of two dimensions, a slash (solidus) should be used: 58 J/mol, 50 m/s. For more complicated units, negative powers ($J\ mol^{-1}K^{-1}$) and parentheses $J\ (mol\ K)^{-1}$ can be used if this facilitates their reading. The main condition is uniform format of similar units of measure.

In series and numerical ranges, units of measure are retained only for the last numeral (18–20 J/mol), except for the degree sign when it indicates angles. Degrees Celsius are formatted as 5°C, not 5°. Angular degrees are never omitted: 5°–10°, not 5–10°. Units of measure with variables are written with a comma (E, kJ/mol), and with sublogarithmic variables, in square brackets without a comma: $\ln t\ [min]$.

SPACES BETWEEN WORDS

References to figures and tables are typed with a space (Fig. 1, Table 2, not Fig.1, Table2). Quotation marks and parentheses are not separated by spaces from the enclosed words: (at 300 K), (a). A space should also be between the number and paragraph sign (No. 2; §5.65). Numbers with letters in designations are typed without spaces: (IVd; 1.3.14a; Fig. 1d).

ILLUSTRATIONS

Black and white illustrations should be presented in an electronic form suitable for direct reproduction. Graphs must be prepared using the corresponding software (Excel, Origin, etc.).

When preparing graphical files, one should comply with the following recommendations: graph, diagrams, charts, etc., in vector form should be provided in the format of the program they were created in or as EPS files. For other illustrations, use JPEG or TIFF files; the optimum resolution is 300 dpi. Photographs should obey a grayscale range of 9–93%.

If you cannot prepare graphic information following these recommendations, scanned images as JPEG or TIFF files with a resolution of 600 dpi are acceptable.

Figure legends are given in figure captions, except for short numerical or letter designations (from left to right or clockwise).

If the text, together with illustrations, is prepared as one file, additional files with illustrations should be provided. In the latter case, each file should contain one figure, and the file names must indicate the sequence of figures.

TABLES

Create tables using the capabilities of Microsoft Word (menu Insert–Table) or Microsoft Excel. Tables formatted manually using numerous spaces (without cells) cannot be used.

Each table must have a heading and a serialized number; the word Table is printed to the left of the heading; footnotes are marked by asterisks. In the heading, one should indicate general information and, in the notes, less important information, to exclude overloading the heading. The number column should be used if numbering is mentioned in the text. A limited amount of data should be presented in a simplified table without a heading. The experimental data should be metrologically processed (number of measurements, error, and other characteristics).

LIST OF REFERENCES

The references cited should be numbered and presented as a list at the end of the paper in the order they are mentioned in the text, tables, or figures. The serialized number in the text is enclosed in square brackets (in line).

For books, use the following format: (1) Authors [surname and initials separated with a comma], (2) Title of Chapter [optional], (3) Title of Book [in original language, italicized] (4) Translation of title, (initial capitals, roman), (5) Editor(s) surname and initials separated with a comma], (6) City: [colon] Publisher, (8) year of publication, (9) volume, (10) edition [if not first], (11) chapter.

Examples:

1. Ivanov, V.M., *Geterotkiklicheskie azotsoderzhashchie azo soedineniya* (Heterocyclic Nitrogen-Containing Azo Compounds), Moscow: Nauka, 1982.
2. Surfactants. A Practical Handbook, Lange, K.R., Ed., Cincinnati: Hanser Gardner, 1999.

When citing a paper from a collection of papers, substitute the paper name, if available, for the chapter. If the name of the editor of the collection is not available, the word *in* may be added (in roman type, without a colon) before the title of the collection to avoid ambiguity.

Example: Kolar, G.E., *Chemical Halogens*, Searle, C.E., Ed., Washington, DC: American Chemical Society, 1984, vol. 2, ch. 14.

Inclusive dates should be given for a several-volume work published over a number of years, if the entire work is cited.

Example: Fieser, L. and Fieser, M., *Reagents for Organic Synthesis*, New York: Wiley, 1968–1975, 7 vols.

For journal papers use the following format: (1) Author's Names, (2) Title of Journal [according to CASSI], (3) year of publication, (4) volume number [always given in Arabic numerals], (5) issue number, (6) page number(s). If the paper is not yet published, use DOI. Examples:

1. Yablotskii, K.V. and Shehovtsova, T.N., *J. Anal. Chem.*, 2010, vol. 65, no. 7, p. 676.

2. Zhao, L., Jin, Y., Yan, Z., Liu, Y., and Zhu, H., *Anal. Chim. Acta*, 2012, vol. 731, p. 75.

3. Slifka, M.K. and Whitton, J.L., *J. Mol. Med.*, 2017, vol. 78. DOI 10.1007/s001090-000086

For abstracts of papers (cited as exceptions) use the following format: (1) Author's Names, (2) Title of Paper [if no title, use *Abstracts of Papers* in roman type], (3) Name of Meeting or Conference (italicized), (4) (Translation of Conference Name) [if applicable, roman], (5) City, (6) year, (7) volume number, (8) issue number, (9) page number(s).

Examples:

1. Zolotov, Yu.A., *Abstracts of Papers, 8th Conf. on Electrochemical Methods of Analysis EMA 2012, Ufa (Abzakovo)*, 2012, vol. 1, p. 3.

1.2. Kovtun, A., Neumann, S., Neumann, S., and Epple, M., *Abstracts of Papers, 11th Int. Conf. on Advanced Materials, Rio de Janeiro*, 2009.

Meeting papers published as a book with publication information are given as follows: Author(s), Title of Paper, Proc. ... Conference (Place, year), city: publisher, year, page(s).

For patents use the following format:

1. Norman, I.O., US Patent 4379752, 1983.

For preprints the format is as follows: (1) Author's Name(s), (2) Title of Paper [in English], (3) Preprint of (4) Name of Institution [in English, italicized], (5) City, (6) year, (7) preprint no.

Example: Grinchenko, B.I., *Mechanisms of Inversion Formation in Recombination Lasers, Preprint of Joint Institute for High Temperatures, Russian Academy of Sciences, Moscow*, 1992, no. 55.

References to online resources are given in the case when there is no adequate reference to a printed version. The reference is given in the form of a usual Internet address followed by the date of check of the workability of the address after a point.

Example:

Consideration of the Major Cannabinoid Agonists, London: Advisory Council on the Misuse of Drugs (ACMD), 2009. <http://www.homeoffice.gov.uk/drugs/acmdreportagonistsy>. Accessed July 10, 2012.