

Guidelines for Authors of *Journal of Superhard Materials*

International journal *Superhard Materials* publishes original articles and reviews on the preparation, properties, and use of superhard materials.

MANUSCRIPT

1. Each manuscript should contain (five to seven) keywords and an abstract of no more than 500 characters, including spaces. The manuscript should be signed by all the authors; the list of the authors should include academic titles, affiliations (name of organization, city, country), phone numbers, and e-mail addresses. Manuscripts are submitted in two copies.

2. The manuscript should be presented in the following order: (a) importance of the problem, (b) state of the art of the problem, (c) goal of study, (d) explanations of use and description of procedures used in study, (e) results, (f) conclusions, and (g) list of references.

3. Authors should follow the standards of scientific language and avoid the use of unconventional terms and concepts.

4. All designations in the text of the manuscript, except for commonly used ones, should be explained. Notation used in formulas should be described immediately after the formula in which it are used for the first time in this manuscript, except for cases where they were described earlier in the text. If abbreviations are used in sub/superscripts of variables or expressions, their meaning should be explained in the text or be evident; for example, m.p. is melting point.

5. References are listed at the end of the manuscript and should be placed in the order they are mentioned in the main text. References in the list should have the following formats:

Journal articles

Maistrenko, A.L., Ivanov, S.A., Pereyaslov, V.P., and Voloshin, M.N., Intensive electric sintering of diamond-based composite, *J. Superhard Mater.*, 2000, vol. 22, no. 5, pp. 36–41.

Fischer, F.D., Svoboda, J., and Petryk, H., Thermodynamic extremely principles for

irreversible processes in materials science, *Acta Mater.*, 2014, vol. 67, pp. 1–20.

Books

Kovalenko, V.S. and Lavrinovich, A.V., *Lazernaya obrabotka keramicheskikh materialov* (Laser Machining of Ceramic Materials), Kyiv: Tekhnika, 1991.

Bersuker, I.B., *Electronic Structure and Properties of Transition Metal Compounds*, Hoboken, NJ: Wiley, 2010, 2nd ed.

Multivolume books

Termodinamicheskie svoistva neorganicheskikh materialov (Thermodynamic Properties of Inorganic Materials), 10 vols., Glushko, V.P., et al., Eds., vols. 1–10, Moscow: Akad. Nauk USSR, 1965–1981.

Trimm, D.L., *Design of Industrial Catalysts*, vol. 11 of *Chemical Engineering Monographs*, Amsterdam: Elsevier, 1980.

Meeting papers

Gubarevich, T.M., Kulagina, L.S., and Larionova, I.S., Special features of elemental composition of carbon products of detonation synthesis, in *V Vsesoyuznoe soveshchanie po detonatsii. Sb. dokl.* (Proc. 5th All-Union Conf. on Detonation), Krasnoyarsk, 5–12 August 1991, Krasnoyarsk, 1991, vol. 1, pp. 130–134.

Petrusha, I.A., Osipov, A.S., Smirnova, T.I., et al., High-E/low-E CBN/Si₃N₄ composite for heavy interrupted cutting, in *Proc. 4th Int. Swedish Production Symp. "SPS11"*, Lund, Sweden, 3–5 May, 2011, Lund Swedish Production Academy, 2011, pp. 161–168.

Collections of articles

Rozenberg, O.A., Tsarenko, I.V., Tsekhanov, Yu.A., On performance of detonation-carbide-coated deformation broaches, in *Improving Efficiency of Broaching (Machining Quality): A Collection of Research Papers*, Riga: 1990, pp. 92–102.

Schulz, W., Niessen, M., Eppelt, U., and Kowalick, K., Simulation of laser cutting, in *The Theory of Laser Materials Processing: Heat and*

Mass Transfer in Modern Technology, Dowden, J.M., Ed., Amsterdam: Springer, 2009, no. 119, pp. 21–69.

Patents

Dolmatov, V.Yu., RF Patent 2348580, 2009.

Dubensky, E.M. and Nilsson, R.T., US Patent 5773735, 1996.

MANUSCRIPT PREPARATION

Manuscripts should be prepared in Microsoft Word. The text should be typed in Times New Roman font, and Greek and mathematical symbols, in Symbol font (12 pt, with 1.5 line spacing). Variables and physical quantities should be typed in italic; Greek symbols, in plain characters; and vectors, in boldface.

Illustrations, depending on their content, should be prepared as individual graphic files as follows:

Grayscale images (photographs, X-ray patterns, portraits, etc.) are submitted in a graphics file in *.bmp, *.pcx, or *.jpg formats. Bitmap images must have a resolution of 600 dpi. Grayscale and color images must have a resolution of 300 dpi. If a decrease in resolution causes any loss to elements in an illustration, the necessary

resolution value may be set, but no greater than 600 dpi.

Line graphics, drawings, diagrams, and charts can be prepared using Microsoft Word, Microsoft Excel, or Origin. Drawings can also be presented in graphic files of *.wmf or *.cdr format. The use of dot shading in vector graphics is not allowed.

Do not insert an image prepared by any editor into a document using Copy and Paste commands. The inscriptions in drawings, wherever possible, should be replaced with numbers and letters, which should be explained in the figure caption or in the text; they must be clearly distinguished from graphical elements. Do not use a grid in charts; only scale marks should be indicated, except when a grid is needed to improve the information content.

Tables should be printed on separate pages and should be titled. Units of measure must be indicated in the tables. Avoid repetition of data in tables and charts and in the text; do not present the same numerical results as tables and graphs simultaneously.

In selecting units of measure, it is recommended to adhere to the International System of Units (SI).