

Reviews on Advanced Materials and Technologies

INSTRUCTIONS FOR AUTHORS

(1) Submission of papers:

Manuscript should be submitted in English to: reviewsamt@itmo.ru

(2) General requirements to the manuscript:

File type: Microsoft Word file (doc or docx),

Format: A4 page size with 1" margins (right, left, top, bottom),

Font: 1.5 line-spaced Times Roman 12 pt,

Length: Review Papers should be limited to 150 typewritten pages (including References and Tables) and fifty (50) Figures each on separate page. Research Papers should be limited to 40 typewritten pages (including References and Tables) and twenty (20) Figures each on separate page.

(3) Structure of the manuscript:

COVER SHEET

TEXT

REFERENCES

FIGURES

TABLES

METADATA IN RUSSIAN

(3.1) COVER SHEET

Title,

Authors,

Affiliations,

Abstract

Keywords

Please note, that authors are strongly encouraged to provide their ORCID identifiers. They can be registered for free at <https://orcid.org/>.

TITLE – bold, centered. (14 pt)

SUPERPLASTICITY IN NANOMATERIALS

Author(s) – please, indicate affiliation(s) by upper-case Arabic numerals and mark the corresponding author by *

S. R. Brown ^{1,*} e-mail: S.Brown@firstmail.com, ORCID: [0000-0000-0000-0001](https://orcid.org/0000-0000-0000-0001)

T. Green ^{1,2} e-mail: T.Green@secondmail.com, ORCID: [0000-0000-0000-0002](https://orcid.org/0000-0000-0000-0002)

Affiliation(s): Department, University, Complete postal address

¹ School of Photonics, ITMO University, Kronverkskiy pr., 49, lit. A, St. Petersburg, 197101, Russia

² Materials Research Group, Department of Mechanical Engineering, University of Southampton, Southampton SO17 1BJ, U.K.

Abstract:

About 100–150 words. Please, try to avoid the use of abbreviations in the abstract.

Keywords (up to five keywords must be provided): Dislocations; Disclinations; Fracture; Plasticity; Grain boundaries

(3.2) TEXT:

- Please, do not use any cross-links in the paper.
- Generally, subdivision of the paper into several Sections (Introduction, Methods, Results and Discussion, Conclusions) is desirable; however, authors can organize the text structure according to their tasks.
- Please, place Figures and Tables in the text where they are mentioned for the first time.
- References should be indicated in the text by consecutive numbers in square brackets, e.g., [1,2,5–7], as a part of the text, e.g:

Similar experimental results were reported in [3,4,8–11], they agree with computations presented in [18,20,27–29].

– Figures should be mentioned in the text as follows: Fig. 1, Figs. 3a and 4b, e.g.:

The reference Raman spectrum of the graphene is demonstrated in Fig. 2 (see [14]), the spectra obtained for Samples 2 and 3 are shown in Figs. 4a and 5a, respectively.

– Equations: Equations must be clearly printed and numbered sequentially with Arabic numerals enclosed with parentheses at the right-hand margin. Please, separate the equations from the text by empty line, equations should be sequentially numbered, e.g.:

The obtained results can be described by a linear approximation

$$y = 1.23x + 3.11 \tag{1}$$

with the experimental error being less than 10%.

– Tables should be mentioned in the text as follows: Table 1, Tables 2 and 3, e.g.:

The reference data summarized in Table 1, Tables 2 and 3 present the experimental data on thermal conductivity and heat resistivity, respectively.

(3.3) REFERENCES

Please, place the reference list below the TEXT section. References should contain the complete information on the source and DOI links (if available), e.g.,

Paper:

[1] A.G. Sheinerman, S.V. Bobylev, A Model of Enhanced Strain Rate Sensitivity in Nanocrystalline and Ultrafine-Grained Metals, *Rev. Adv. Mater. Sci.*, 2018, vol. 57, no. 1, pp. 1–10. DOI: <https://doi.org/10.1515/rams-2018-0042>

[2] G. Zhou, Q. Huang, Y. Chen, X. Yu, H. Zhou, Annihilation mechanism of low-angle grain boundary in nanocrystalline metals, *Metals*, 2022, vol. 12, no. 3, art. no. 451. DOI: <https://doi.org/10.3390/met12030451>

Book:

[3] J.P. Hirth, J. Lothe, *Theory of Dislocations*, Wiley, New York, 1982.

Chapter in a book:

[4] M. Vaseem, A. Umar, Y.-B. Hahn, ZnO Nanoparticles: Growth, Properties, and Applications, in: A. Umar, Y.-B. Hahn (Eds.), *Metal oxide nanostructures and their applications*, vol. 5, American Scientific Publishers, 2010, pp. 1–36

Conference Proceedings:

[5] M.A. Grekov, A.B. Vakaeva, ZnO Nanoparticles: Growth, Properties, and Applications, in: M. Papadrakakis, E. Onate, B. Schrefler (Eds.), *Proceedings of the 7th International Conference on Coupled Problems in Science and Engineering (COUPLED PROBLEMS 2017)*, International Center for Numerical Methods in Engineering, CIMNE, 2017.

(3.4) FIGURES

For review purposes figures must be embedded into manuscript file and placed where they are mentioned for the first time. To achieve the best image quality authors are also encouraged to provide figures in separate files (not embedded into MS Word document). Accepted formats are: JPG, TIF, PNG for bitmap images and PDF, EPS, EMF for vector images. Bitmap images must have resolution of at least 300 dpi for photos and 600 dpi for line art. Figure caption should be placed below image and formatted as follows:

Fig. 2. SEM images obtained for Sample 4: (a) initial Ni-Gr composite with 0.1 wt.% of Gr, (b) the same composite after HPT.

In case of images taken from the works of other authors: please, note that such images are protected by Copyright; you need to get the permission to reproduce these images.

Fig. 3. Development trends for planar SOFCs. Reprinted with permission from R. Riedel, *Ceramics Science and Technology, Volume 4, Applications*, John Wiley & Sons, 2013, © 2013 John Wiley & Sons.

(3.5) TABLES: please, place each table in the text where it is mentioned for the first time, number consecutively in arabic numerals and supply a heading.

(3.6) METADATA IN RUSSIAN

The Journal requires authors to provide article title, abstract and keywords translated into Russian language. Additionally, names of Russian authors and organizations must be provided in Russian (names of foreign authors and organisations should be kept as is). In case authors are not able to do translation themselves, it will be performed by publisher. Additionally, please provide UDC codes (<https://udcc.org/>) characterizing fields of knowledge appropriate for your article.

Article title in Russian

Authors (Russian authors in Russian language, foreign authors in English)

Affiliations (Russian organizations in Russian language, foreign ones in English)

Abstract in Russian

List of keywords in Russian

UDC: 538.91; 539.374.1