

Special Issue

Semiconductor Hetero-Nanostructures for Opto-Electronics Applications

Message from the Guest Editors

This issue will provide a platform to discuss new nanodevice structures and novel nano-materials for Opto-Electronics at different stages of development to find the ways towards industrial applications. The topics will include the latest developments of novel Semiconductor Hetero-Nanostructures used in lasers (edge emitters, VCSELs, QCLs, microdisk emitters), photodetectors, optical amplifiers, optical switches, waveguides and optoelectronic devices as well as new device applications based on such nanostructures. It will bring insight into the relevant material parameters that play a key role in device functionality, as well as the overall device design and resulting physics.

Special Issue Link: <https://www.mdpi.com/si/81180>

Guest Editors

Prof. Dr. George E. Cirlin

Khlopina 8/3, Alferov Academic University, 194021 St. Petersburg, Russia

Prof. Dr. A.Yu. Egorov

Connector Optics LLC, 16 lit B Domostroitelnaya Street, 194292 St. Petersburg, Russia

Deadline for manuscript submissions

closed (30 July 2022)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



[mdpi.com/si/81180](https://www.mdpi.com/si/81180)

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

[mdpi.com/journal/
nanomaterials](https://www.mdpi.com/journal/nanomaterials)





Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



[mdpi.com/journal/
nanomaterials](https://mdpi.com/journal/nanomaterials)



About the Journal

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)