nanomaterials

IMPACT FACTOR 4.3

Indexed in: PubMed

CITESCORE 9.2

an Open Access Journal by MDPI

(Al, Ga)N-Based Nanostructures for UV-C Optoelectronics

Guest Editor:

Dr. Valentin Jmerik
Centre of Nanoheterostructure Physics, Ioffe Institute, 26 Politekhnicheskaya, 194021 St. Petersburg, Russia

Deadline for manuscript submissions:
closed (31 July 2023)

Message from the Guest Editor

Dear Colleagues,

This Special Issue will be devoted to the problems of increasing the efficiency of UV-C optoelectronic devices by proposing new ideas in the field of both epitaxial growth of (Al,Ga)N nanoheterostructures using various technologies and post-growth processing of structures. This activity was started in the previous Special Issue "Semiconductor Heterostructures with Quantum Wells, Quantum Dots and Superlattices", and in this issue, we welcome new approaches to create (Al,Ga)N-based nanoheterostructures with an accuracy of several monolayers and controlled change in composition and elastic stresses. Special attention will be paid to the study of epitaxial growth modes of monolayer-thick (Al,Ga)N nanoheterostructures, charge carrier localization effects, and exciton nature of luminescence in such quantum-sized structures.

Dr. Valentin Jmerik
Guest Editor

nanomaterials

IMPACT FACTOR 4.3 | Indexed in: PubMed | CITESCORE 9.2

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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.

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, CAPlus / SciFinder, Inspec, and other databases.
Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
𝕏@nano_mdpi