

Special Issue

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

Message from the Guest Editor

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.

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)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/117805

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

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

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)