

## Special Issue

# Controlled Growth and Properties of Semiconductor Nanomaterials

### Message from the Guest Editor

This Special Issue focuses on the controlled growth of nanomaterials, the characterization of nanostructures, and practical applications. The growth starts from substrates, followed by buffers, epi-layers, and nanostructures. The growth process is in situ characterized if possible. The growth diagram can be shown, and the lattice misfit, defect, strain, polarity control, and crystal phase transition can also be discussed. The properties which are affected by different nanostructures or nanomaterials should be investigated. Original research articles and reviews are welcome in this Special Issue. Research areas may include (but are not limited to) the following:

- Fabrications and characterizations of nanostructures;
- Novel quantum structures and their applications;
- Devices based on semiconductor nanomaterials.

We look forward to receiving your contributions.

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### Guest Editor

Dr. Xin Rong

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### Deadline for manuscript submissions

closed (23 May 2025)



## Nanomaterials

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## 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.

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### Editor-in-Chief

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