

## Special Issue

# Progress of Semiconductor Nanomaterials: From Material Synthesis to Functional Devices

### Message from the Guest Editor

The current state-of-art of photonics allows for tuning the opto-electronic properties of the materials, rendering high performance systems intended for many technological advances. Within this context, semiconductor nanomaterials play nowadays a chief role in countless (photo/opto-)electronic devices and applications, whose properties are tightly linked to their microstructure. Thus, the design of customized functionalities relies on playing with different combinations of materials (including alloying), their morphology and environment (size, shape, relative orientation, etc.), attainable through optimized synthesis and processing strategies. This Special Issue focusses on new advances achieved in semiconductor materials. The research topics cover semiconductor synthesis and (micro/nano-)processing, characterization, applications and devices, with special interest on complex nano-architectures, novel material systems, new/improved synthesis and processing procedures, high-resolution characterization techniques, etc.

### Guest Editor

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### Deadline for manuscript submissions

closed (31 March 2022)



## 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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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### Editor-in-Chief

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