

Special Issue

Nano Devices and Nano Sensors

Message from the Guest Editors

Semiconductor nanostructures with 1D and 2D morphologies have attracted a great deal of interest in many fields of application. Whereas, early on, 2D heterostructure transistors have been investigated as efficient transducers for detecting physical, chemical, and biological signals, interest more recently has moved toward nanowires and nanorods with essentially 1D morphology. Such structures feature excellent crystallinity, good transport properties, and photoluminescence, which has allowed for interesting applications in opto-electronics and in photonic crystal technologies. In view of this situation, you are invited to submit contributions that are devoted to the synthesis and study of innovative kinds of nanomaterials, particularly with a focus on enabling novel device concepts and demonstrating novel kinds of applications. Contributions are encouraged but not limited to existing and emerging fields of applications like chemical, gas, and biological sensing, optoelectronics, power-efficient devices, and energy applications.

Guest Editors

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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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