

Special Issue

Low-Dimensional Nanostructures: Synthesis, Characterization and Applications

Message from the Guest Editor

Over the past decade, low-dimensional materials have been successfully developed because of their unique electrical, physical and chemical properties and have been used for multifunctional electronic and optoelectronic applications. Subsequently, low-dimensional materials are rapidly gaining worldwide attention, aiming towards industrial-scale real-time device applications. Moreover, their extremely high surface area and existence of surface defects make them promising and compatible for various applications. This Special Issue is focused on low-dimensional materials-based electronic and optoelectronic device applications (including optical, chemical, biological and electrical devices). Owing to the continuous progress in the synthesis and engineering of low-dimensional materials, a variety of novel functionalities can be achieved either by creating heterostructures with them or doping, which can offer an extra degree of tunability in electrical and optoelectrical devices. The Editorial Board of the journal *Nanomaterials* and myself are very pleased to announce this Special Issue and are looking forward to your contribution.

Guest Editor

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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.

Editor-in-Chief

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