Special Issue

Photo and Electro Functions and Applications of Low-Dimensional Nanomaterials

Message from the Guest Editors

Low-dimensional nanomaterials—0D nanoparticles, 1D nanotubes, and 2D nanosheets—exhibit unique properties that differ from their bulk forms. These characteristics make them essential in nanoscience and technology. Understanding their photophysical and electronic behavior is key to advancing optoelectronics and electronics. This Special Issue highlights recent experimental and theoretical advances in low-dimensional materials. We welcome original research and reviews on their photophysical and electronic properties. Topics of interest include:

- Luminescent and nonlinear optical materials;
- Electronic properties and states;
- Optoelectronic and electronic device fabrication;
- Advanced characterization techniques.

We are particularly interested in submissions that address a diverse range of materials, including the following:

- Inorganic nanomaterials;
- Organic nanomaterials;
- Inorganic-organic hybrid materials.

We invite you to contribute novel research to this Special Issue and share your work with the global scientific community. We look forward to your valuable contributions.

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

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