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Innovations in Nano-Based Optoelectronic Devices

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Innovations in nano-based optoelectronic devices represent a significant advancement in the field of materials science and engineering, harnessing the unique properties of nanomaterials to revolutionize the way light is generated, manipulated, and detected. These devices benefit from the enhanced electrical, optical, and mechanical properties of nanoscale materials.

At the core of these innovations is the ability to control the interaction between light and matter on an unprecedented scale.

The integration of these nanostructures into optoelectronic devices paves the way for the development of flexible, lightweight, and transparent electronics, opening up new applications in wearable technology, smart windows, and beyond. The ongoing research and development in nano-based optoelectronics promise not only to enhance the performance of existing technologies but also to create entirely new functionalities and applications, underscoring the transformative potential of nanotechnology in the modern world.

Prof. Dr. *Qinghua Zhao*

Guest Editor



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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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