

Special Issue

Applications of Nanomaterials in Light Emitting Diodes

Message from the Guest Editors

Light-emitting diodes (LEDs) have emerged as a highly promising technology for lighting, displays, and optoelectronic devices. The integration of nanomaterials into LEDs has significantly advanced the field, offering enhanced performance, improved efficiency, and new functionalities. This Special Issue aims to cover various topics related to the application of nanomaterials in LEDs. We invite original research articles, short communications, and systematic reviews for this Special Issue. The scope includes, but is not limited to:

- The synthesis and characterization of nanomaterials tailored for LED applications, such as quantum dots, nanowires, and perovskites;
- The fabrication and optimization of LED devices via the incorporation of nanomaterials into device architectures.

By encompassing a broad spectrum of topics, this Special Issue aims to provide valuable insights into the advancements and challenges in the field of nanomaterial-integrated LEDs. We encourage researchers in the field to contribute pioneering work, contributing to our collective understanding and future development.

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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