



## Perovskite Nanomaterials for Optoelectronic Devices and Sensors

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### Message from the Guest Editor

Perovskite nanomaterials have emerged as highly promising candidates for optoelectronic devices and sensors due to their exceptional properties. These materials exhibit remarkable optoelectronic performance, enabling their application in various technologies. In the realm of optoelectronic devices, perovskite nanomaterials have demonstrated outstanding performance in solar cells, light-emitting diodes (LEDs), and lasers. Continued research and development in this field promise to improve the stability, scalability, and reliability of perovskite nanomaterials, thereby exposing their full potential in advancing optoelectronic devices and sensors.

This Special Issue welcomes high-quality reviews and experimental, theoretical, and machine learning work on optoelectronic devices and sensors for perovskite nanomaterials. Potential topics include, but are not limited to, the following:

1. The synthesis and optical properties of perovskite and related materials;
2. Perovskite solar cells, LEDs, and lasers;
3. Perovskite sensors, biosensors, and photodetectors.





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## Editor-in-Chief

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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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