Special Issue

Nanostructures for Perovskite Solar Cells and Light-Emitting Diodes

Message from the Guest Editor

Perovskite optoelectronic conversion materials have quickly reached high energy conversion efficiencies in both solar cells and light-emitting diodes (LEDs). Numerous methods have been proposed to promote their possible commercialization with continuous improvements to optical properties. We invite materials scientists, chemists, physicists, and engineers to discuss the science of and technology for perovskite nanostructure materials in solar cells and LEDs. Topics of particular interest include, but are not limited to:

- methods for the synthesis of superior perovskite materials;
- doped or non-Pb perovskite materials;
- new device structures and performances;
- optical and optoelectronic properties;
- surface processing of perovskite materials;
- stabilization of materials and devices;
- carrier transportation mechanisms in device structures; and
- theoretical calculations for and simulation of perovskite materials and devices.

All accepted papers will be published online with DOIs after peer review.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2021)

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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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
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