



Advances in Nanomaterials for Perovskite Solar Cells

Guest Editor:

Prof. Dr. Jingjing Chang

School of Microelectronics,
Xidian University, 2 South Taibai
Road, Xi'an 710071, China

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Message from the Guest Editor

Dear Colleagues,

Perovskite solar cells (PSCs) have received much attention in the last few years, and their power conversion efficiency has increased to over 25%. The efficiency of PSCs is comparable to silicon solar cells and is expected to be an important direction for a low-carbon society in the future. The development of new nanomaterials, such as hole/electron transporting materials, perovskite materials, and carbon materials, is a potential way to further enhance the power conversion efficiency and device stability.

The aim of this Special Issue is to collect state-of-the-art contributions related to various applications of nanomaterials in the field of perovskite solar cells. This includes but is not limited to electrode materials, nanostructured perovskite materials, hole/electron transport materials, carbon materials, and their applications in perovskite solar cells. The authors are encouraged to highlight the advantageous features of these nanomaterials as well as to address their current limitations and challenges.





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Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University
of California Davis, One Shields
Avenue, Davis, CA 95616-5270,
USA

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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Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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