Special Issue

Advances in Nanomaterials for Perovskite Photovoltaic Devices

Message from the Guest Editor

Perovskite solar cells (PSCs) have received a great deal of attention in the last few years, and its 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 novel 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 novel 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 photovoltaic device. The authors are encouraged to highlight the advantageous features of these materials, as well as to address their current limitations and challenges.

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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