Special Issue

Advanced Energy Materials for Perovskite Solar Cells

Message from the Guest Editor

Photovoltaic (PV) devices play a vital role in converting solar energy into electricity, offering a promising avenue for mitigating carbon emissions and addressing the escalating demand for energy consumption. Several PV technologies have helped to shape the environment of renewable sources of energy. Perovskite solar cells (PSCs) have emerged as particularly noteworthy contenders in this area. Therefore, the pursuit of highly efficient perovskite solar cells in response to pressing economic concerns has become paramount. Driven by their physicochemical properties, high power conversion efficiencies, flexibility, low manufacturing costs, and long-term stability, perovskite solar cells are considered to be one of the most promising photovoltaic technologies.

This Special Issue aims to delve into the latest achievements in perovskite solar cells, covering novel materials, device structures, technologies, and characterization methods. This Special Issue aims to provide a comprehensive overview of both experimental and theoretical approaches, showcasing the cutting-edge developments in this field.

Guest Editor

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Message from the Editorial Board

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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