Special Issue

Frontiers in Perovskite Solar Cells and Energy Storage

Message from the Guest Editors

Tremendous improvement in power conversion efficiency and versatile properties of halide perovskites have shown that it can be implemented in various applications including photovoltaics, light-emitting diodes, X-ray detectors, photocatalysis, and storage devices. In this regard, low-temperature processed perovskite thin films, its scalability, physical and structural characterizations, and problems associated with large-area flexible devices are key factors for commercialization of this technology. Original papers on all types of deposition techniques and all-halide perovskites including lead-free and all-inorganic perovskites and its implementation in tandem solar cells are welcome. Of particular interest are recent developments in flexible perovskite solar cells, stabilization aspects, and large-area device fabrication. Articles and reviews dealing with applications and prospects in low-cost photovoltaics and its other applications including photocatalysis, optoelectronics, metal halide perovskite solar-driven electrocatalysis and energy storage devices are very welcome.

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Message from the Editor-in-Chief

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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