Special Issue

Perovskite Semiconductors: From Material to Applications

Message from the Guest Editors

Perovskite-based materials have emerged in various fields and applications as an important class of solid-state components. Wide-ranging properties can be addressed in perovskite lattices through the utilization of various organic and inorganic ionic compounds to deliver a wide window of application from solid-state physics to chemistry, electronics, optics, and photonics. The purpose of this Special Issue is to report recent state-of-the-art results and reviews for the development of perovskite-based materials as a key function of advanced devices and novel structures. The Special Issue covers all aspects of perovskite semiconductors, from material to application, including quantum calculation and theory, simulation, synthesis and crystal growth, phase extraction and purification, novel deposition techniques, up-scaling process, crystal engineering, passivation and interface engineering, life cycle analysis and environmental impact, investigation of novel properties, and any development of device performance and stability.

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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.

Editor-in-Chief

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