Special Issue

Advances in Photovoltaic Materials

Message from the Guest Editor

The most important material for solar cell production is silicon. Being the most often used semiconductor material, it has some important advantages. Though single-crystalline silicon solar cells have been the most efficient of all cells, their disadvantage is the cost factor. Gallium arsenide is used in the production of high-efficiency solar cells. It is often utilized in concentrated PV systems and space applications. Their efficiency is as good. Cadmium telluride thin-film material produced by deposition or by sputtering is a promising low-cost foundation for photovoltaic applications in the future. The disadvantage of this procedure, however, is that the materials used in production are toxic. The cells are inexpensive, easy to produce, and can withstand long exposure to light and heat compared to traditional silicon-based solar cells. Further, the organolead halide perovskite-structured solar cell is considered one of the most promising photovoltaic technologies. However, no ideal material has yet been found to compete with crystalline silicon. We kindly invite you to submit a manuscript(s) for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

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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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