Special Issue

New Trends in Solar Energy Materials: Characterization, Properties and Applications

Message from the Guest Editors

Photovoltaics (PV) is a key technology option for realizing a decarbonized power sector and sustainable energy supply. This PV technology is very versatile, and hence it can be deployed in a modular way almost everywhere on the planet. Regardless of how fast energy prices increase in the future, and the reasons behind these increases, PV is one of the renewable energies that not only offers the stabilization of but even a reduction in future prices.

The main purpose of this Special Issue is to give an overview of the current trends in energy materials for investigation and innovation in PV technology that allow the development of more efficient products, within which all aspects of the value chain are covered. To be successful, cutting-edge materials involved in those technologies need to be implemented in novel solutions. Recently, low-dimensional systems based on graphene-related, organic and semiconductor materials have attracted interest as a way to cope with PV system challenges.

This Special Issue will be dedicated to all solar energy materials. Full papers, communications, and reviews are all 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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