Special Issue

Solar Energy Harvesting Materials: Synthesis and Applications

Message from the Guest Editors

This Special Issue focuses on the latest advancements in materials for solar energy harvesting. As the world seeks sustainable solutions to combat climate change, efficient solar energy technologies are crucial. This collection aims to explore novel materials for photovoltaics, solar fuels, and energy storage systems and provide a comprehensive understanding of the synthesis, characterization, and practical applications of these materials. We invite contributions that cover the development of innovative materials, such as organic, inorganic, and hybrid systems for solar energy conversion. Studies on material properties, including optical and electrical characteristics, as well as advancements in photovoltaic cells, perovskite technologies, and solar fuel production, are encouraged. Additionally, papers addressing energy storage solutions and the integration of solar energy systems are welcomed. This Special Issue will offer valuable insights for researchers and industry professionals working towards more efficient, cost-effective, and environmentally friendly solar energy solutions, furthering the goal of sustainable energy transition.

Guest Editors

Dr. Tiantian Li

Key Laboratory of Semiconductor Photovoltaic Technology and Energy Materials of Inner Mongolia Autonomous Region, School of Physical Science and Technology, Inner Mongolia University, Hohhot 010021, China

Dr. Fuhua Hou

Key Laboratory of Semiconductor Photovoltaic Technology and Energy Materials of Inner Mongolia Autonomous Region, School of Physical Science and Technology, Inner Mongolia University, Hohhot 010021, China

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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