

Special Issue

Nanotechnology for Solar Energy Conversion

Message from the Guest Editor

Scientists all over the world are working to develop various devices or systems to convert solar energy efficiently into electrical, chemical, or thermal energy. Nanotechnology is demonstrating huge potential in this field because the fascinating optical and electronical properties of nanomaterials play an important role in solar energy conversion and storage. This Special Issue aims to share recent progress and developments in nanotechnology for solar energy conversion and storage. We invite authors to contribute original research articles as well as review articles covering a broad range of subjects, from modeling nanomaterials to new device applications for solar energy conversion and storage:

- Semiconductor nanomaterials and nanostructured films
- Solar cells (quantum dots, organic-inorganic hydride, dye-sensitized, thin-film solar cell, etc.)
- Solar hydrogen (photoelectrochemical and photocatalytic hydrogen production)
- Nanophotocatalysis for CO₂ reduction
- Nanophotocatalysis for chemical reactions
- Nanomaterials for solar to thermal energy conversion and storage
- Mechanistic studies, engineering, and modeling on nanophotocatalysts

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2022)



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About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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