



Nanotechnology for Solar Energy Conversion

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Message from the Guest Editor

Dear Colleagues,

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





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Message from the Editor-in-Chief

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