



International Journal of Photoenergy

Special Issue on
**Recent Advances in Nanostructured Materials for
Efficient Energy Conversion and Storage**

CALL FOR PAPERS

Over the last twenty years photonics, the science of light has played a key role in creating the world as we know it. Nanotechnology-enabled materials are now universally seen as the direction where the global economy will grow strongly in the 21st century. Nanostructured materials are advantageous in offering huge surface to volume ratios, favorable transport properties, altered physical properties, and confinement effects resulting from the nanoscale dimensions and have been extensively studied for energy-related applications such as solar cells, catalysts, thermoelectrics, lithium ion batteries, supercapacitors, and hydrogen storage systems. We believe that the photonic revolution will continue to grow, explosively fuelled by a new type of photonic nanostructured materials.

This special issue is intended to present and discuss recent advances in nanostructured materials for efficient energy conversion and storage which are expected to contribute to the interaction between the nanotechnology world and the science of light. Therefore, we invite investigators to contribute review and original papers describing recent findings in the field of nanostructured materials, including theoretical and experimental studies.

Potential topics include, but are not limited to:

- ▶ Carbon nanomaterial for energy conversion storage
- ▶ Molecular photochemistry
- ▶ Nanostructured conductive polymers as active electrode materials for electrochemical devices
- ▶ Hydrogen bonding effects on photoelectrochemistry nanostructured electrodes
- ▶ New mechanisms and structures enhancing the capability of nanostructured materials for energy conversion and storage
- ▶ Nanotechnology for solar energy collection and conversion
- ▶ Limitations of present nanostructured materials: new insights into future directions

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ijp/ranm/>.

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First Round of Reviews

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