



Journal of Nanomaterials

Special Issue on
**Semiconductor Nanomaterials for Energy
Conversion and Storage**

CALL FOR PAPERS

Energy and environmental problems have raised great concerns in recent decades. On one hand, we have an increasing demand on energy for which the consumption causes many environmental problems. On the other hand, clean energy is significantly increasing, but the consumption of fossil energy is still abundant. To date, beside conventional energy including fossil energy, hydroelectric power, and wind energy, scientists have developed several technologies to generate energy by converting solar energy into electricity or heat, by converting heat energy to electricity, or by converting mechanical energy to electricity. Indeed, generation of energy is only one out of many issues for energy engineering. Now we have three big challenges in the area of new energy: generation, transport, and storage of energy. A demonstration that energy can be generated, transported, and stored by applying new materials and nanostructures is of great importance in both scientific research and practical applications. This special issue focuses and calls for papers on semiconductor materials and nanostructures for the generation, transport, and storage of energy.

Potential topics include, but are not limited to:

- ▶ Nanogenerators
- ▶ Solar cells
- ▶ Solar absorbers
- ▶ Thermoelectrics
- ▶ Supercapacitors
- ▶ Lithium ion batteries

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