

A special issue on

“Semiconductor Nanostructures 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, scientist 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 new 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, including but not limited to

- Nanostructures for electricity generation;
- Solar cells;
- Solar absorbers;
- Thermoelectrics;
- Superconductors;
- Supercapacitors;
- Lithium ion batteries;
- Electrode materials.

Manuscripts can be original research works on experimental or theoretical studies, or review articles. Manuscripts must be prepared according to Journal's guidelines, available at http://www.aspbs.com/efocus/inst-auth_efocus.htm

Prospective authors should submit **a single file** having text/figures/tables all together in MS Word format directly to the **Guest Editors via e-mail**. A graphical abstract is mandatory for all types of papers. All manuscripts will be peer-reviewed to ensure a high quality of articles. Please indicate in your cover letter that the submitted paper is original and has not been published previously and is not currently submitted to any other journal and will not be submitted elsewhere before a final decision is made by this journal.

Lead guest editor: Prof. Xiang Wu

College of Chemistry and Chemical Engineering, Harbin Normal University, China
China, E-mail: wuxiang05@gmail.com

Co-guest editor: Dr. Chuanfei Guo

Department of Physics, University of Houston, USA
E-mail: cguo2@central.uh.edu

Co-guest editor: Prof. Haibo Zeng

School of Materials Science and Engineering, Nanjing University of Science and Technology, China
E-mail: zeng.haibo.nano@gmail.com

Co-guest editor: Prof. Xijin Xu

College of Physics science and Technology, University of Jinan, China
E-mail: sps_xuxj@ujn.edu.cn

Co-guest editor: Prof. Jinhua Zhan

Department of Chemistry, Shandong University, China
E-mail: jhzhan@sdu.edu.cn

Key Date:

Manuscript due: March 10th, 2014

Authors' notification: April 21th, 2014

Tentative publication date: May-June, 2014