

Special Issue on
Nanomaterials for Energy Storage Systems

CALL FOR PAPERS

Rapid increase in industrialization, urbanization, and population growth has led to large increase in energy demand and serious environmental pollution. With growing concern on environmental protection in recent years, urgent research efforts are needed to develop alternative energy related systems that are efficient, economical, and environmentally friendly. Typical systems under consideration include solar cells, batteries, capacitors, fuel cells, and thermoelectric catalysts, photocatalysts, and electrocatalysts.

Nanomaterials, which are principally of less than 100 nm in size at least in one of dimensions, can endow energy devices and systems with unique properties. Recent progress has been achieved in zero-, one-, two-, and three-dimensional nanostructured materials for applications in energy storage and conversion with fascinating performances. However, their potential applications are still limited due to a lot of problems, such as materials synthesis, interface, electrochemistry, anode protection, and mechanics problems in energy materials and system.

This special issue aims to reflect recent advances in nanomaterials for energy storage systems, especially for above problems. We would like to invite researchers from all of country to contribute their original research and important review articles that will stimulate further discussion and research efforts along this area. The contributors are encouraged to address new methods for nanomaterials synthesis, characterization, theoretical calculation, mechanics problems of energy devices, and properties.

Potential topics include but are not limited to the following:

- ▶ Nanomaterials for supercapacitors or rechargeable batteries including lithium-ion, sodium-ion, lithium-sulfur, metal-air, and redox-flow batteries
- ▶ Mechanics problems or coupling problem of mechanics-electrochemistry in energy materials and system
- ▶ Theoretical calculation, simulation, and modeling of related devices and systems

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jnt/ness/>.

Lead Guest Editor

Ning Hu, Chongqing University,
Chongqing, China
ninghu@cqu.edu.cn

Guest Editors

Li Lu, National University of Singapore,
Singapore
luli@nus.edu.sg

Cheng Yan, Queensland University of
Technology, Brisbane, Australia
c2.yan@qut.edu.au

Junmin Xue, National University of
Singapore, Singapore
msexuejm@nus.edu.sg

Junqian Zhang, Shanghai University,
Shanghai, China
jqzhang2@shu.edu.cn

Limin Zhou, Hong Kong Polytechnic
University, Hung Hom, Hong Kong
mmlmzhou@polyu.edu.hk

Manuscript Due

Friday, 30 December 2016

First Round of Reviews

Friday, 24 March 2017

Publication Date

Friday, 19 May 2017