

# Science of Advanced Materials

(<http://www.aspbs.com/sam>)

*A Special Issue on*

## **Advanced hybrid nanomaterials for energy conversion and storage**

### **Call for papers**

Technologies about renewable energy and green environment have received extensive attentions in the past few decades. Energy conversion/storage has been one of the hottest research fields for more than half a century. Recently, nanostructured hybrid materials have been intensively investigated, featuring their fascinating properties and performance in energy conversion and energy. Great efforts have been devoted to studying their synthesis strategies, unique properties, and potential applications in various devices. Nevertheless, challenges still exist and more energy devices are still highly demanded for actual applications. At the same time, the ever-increasing demand for alternative energy strategies to fossil fuels/electrochemical cells has motivated considerable efforts to develop novel energy conversion and storage systems. Considering the synergetic effects between different components, hybrid nanomaterials may exhibit dramatically enhanced performance compared to their single components. Recent years have seen great technological breakthroughs in hybrid nanomaterials for energy storage/conversion applications. A collective demonstration that more energy can be generated, converted, transported, and stored by applying new materials is of great importance in both scientific research and practical applications. It is therefore urgent and significant to have a special issue to appreciate new advances and to review recent progresses of advanced hybrid nanomaterials for applications in energy conversion and storage.

This special issue focuses on (but not limited to) the following topics:

- ❖ Novel hybrid materials for electro/photocatalysis
- ❖ Innovative electrode materials for supercapacitors, fuel cells, metal ion batteries, and metal sulphur batteries;
- ❖ Environmental energy harvesting materials and devices
- ❖ Other energy conversion and storage applications.

## Guest Editors:

### **Prof. Xiang Wu**

School of Materials Science and Engineering, Shenyang University of Technology, China

Email: [wuxiang05@163.com](mailto:wuxiang05@163.com)

### **Dr. Bo Chen**

School of Materials Science and Engineering, Nanyang Technological University, Singapore

Email: [chenbolzu@ntu.edu.sg](mailto:chenbolzu@ntu.edu.sg)

### **Prof. Weihua Han**

School of Physical Science and Technology, Lanzhou University, China

Email: [hanwh@lzu.edu.cn](mailto:hanwh@lzu.edu.cn)

### **Prof. Bin Dong**

College of Science, China University of Petroleum, China

E-mail: [dongbin@upc.edu.cn](mailto:dongbin@upc.edu.cn)

## ABOUT 'SCIENCE OF ADVANCED MATERIALS'

*Science of Advanced Materials* is an interdisciplinary peer-reviewed journal consolidating research activities in all experimental and theoretical aspects of advanced materials in the fields of science, engineering and medicine including synthesis, fabrication, processing, spectroscopic characterization, physical properties, and applications of all kinds of inorganic and organic materials, metals, semiconductors, superconductors, ceramics, glasses, ferroelectrics, low and high-k dielectrics, sol-gel materials, liquid crystals, biomaterials, organics and polymers, their based electronics, optics, photonics and biological devices.

## MANUSCRIPT SUBMISSION

□ All manuscripts must be 100% original and unpublished which should be prepared according to the Journal's guidelines, available at <http://www.aspbs.com/Science of Advanced Materials.html>. Submit your manuscripts in MS word and PDF format online to the any of the email addresses mentioned below.

□ In the cover letter, please mention that the manuscript is submitted for the special issue. All papers submitted to this issue will be subjected to a strict peer review process to ensure high quality articles. Mention the name of three potential referees with their contact address and designation in the cover letter.

□ Authors should submit a statement of novelty and originality in the cover letter to ensure that that the submitted paper is original and it is neither published previously nor submitted to any other journal presently and will not be submitted somewhere else before a final decision is made by this journal. The earlier published articles or submitted for publications in other journals/conference proceedings will not be considered. The language of the manuscript is English.

## IMPORTANT DATES

Last date of manuscript submission: **15 October, 2018**

Due Date of completion of Review: **15 November, 2018**

Expected date of publication: **December-2018/January-2019**