

Special Issue on “Materials for Energy Storage and Conversion in Aerospace”

Guest Editor: Xiaogang Zhang

CV of Prof. Zhang

Xiaogang Zhang earned his Ph.D. in chemistry from Lanzhou University in 2001. He is now a Professor of Chemistry at the College of Material Science and Technology, Nanjing University of Aeronautics and Astronautics, China. His current research interests include the design and development of nanostructured materials and their applications in energy conversion and storage.

Energy conversion and storage is one of the most important issues in the world due to increasing energy demand. The electrochemical and chemical energy systems have a key role in energy sustainability, energy conversion, conservation and storage; pollution control, and greenhouse gas reduction. The development of new materials for energy conversion and storage applications is vital in order to meet the energy challenges.

To benchmark the state of research in the materials for energy storage and conversion pertaining to aerospace applications and promote cooperation in the aerospace industry, Transactions of Nanjing University of Aeronautics & Astronautics (TNUAA) intends to present an issue intended to present a novel, high quality, original research articles as well as review articles/short communication/letters focused on “Materials for Energy Storage and Conversion in Aerospace”. It is dedicated to the physical, chemical or engineering sciences that underpin the design, fabrication and application of these materials. This issue is so honored to invite Prof. Xiaogang Zhang from Nanjing University of Aeronautics and Astronautics as the guest editor.

TNUAA is devoted to the dissemination of original archival research papers on theoretical developments, novel applications and case studies regarding pressing issues in aeronautics, astronautics, and civil aviation. As a peer-reviewed journal published bimonthly, TNUAA has been indexed by the predominant databases such as Ei Compendex (USA), Scopus (Holland), Mathematical Review (USA), Cambridge Scientific Abstracts (CSA), SA (England), Zbl (Germany), Chinese Science Citation Database (CSCD), Chinese S&T Journal Citation Reports (CSTJCR), etc.

Topics

The potential possible topics of TNUAA “Special Issue on Materials for Energy Storage and Conversion in Aerospace” include, but are not limited to the following:

- Batteries: Li-ion batteries, Na-ion batteries, Mg-ion batteries, Al-ion batteries, Li-S batteries, metal-air batteries, and redox flow batteries
- Supercapacitors: electrochemical double layer capacitors, pseudocapacitors, hybrid capacitors, and flexible solid-state supercapacitors
- Fuel cells: proton exchange membrane fuel cells, alkaline fuel cells, phosphoric acid fuel cells, molten carbonate fuel cells, solid oxide fuel cells, and microbial fuel cells
- Solar cells and solar fuels: dye-sensitized solar cells, quantum dot solar cells, perovskite solar cells, photoelectrochemical water splitting, and photoelectrochemical CO₂ reduction
- Self-powered systems: integrated energy conversion and storage devices

Important Dates

Full paper due for review: May 30th, 2018

Notification of results of first review cycle: June 15th, 2018

Revised paper submission due for Editor Board Meeting: June 30th, 2018

Final notification of results of Editor Board Meeting: July 10th, 2018

Publication in print due: August 30th, 2018

Submission Instructions

We welcome paper submissions between 6 and 12 pages, written in English. Paper submissions must not have been previously published. A paper is considered to have been previously published if it has appeared in a peer-reviewed journal, magazine, book, or meeting proceedings that is reliably and permanently available afterward in print or electronic form to non-attendees, regardless of the language of that publication. Complete papers should be submitted electronically in the online submission and peer view system (<http://tnuaa.nuaa.edu.cn>) or by E-mail (tnuaa@nuaa.edu.cn), entitled "Contribution to the Special Issue on Materials for Energy Storage and Conversion in Aerospace".

Both Research Articles and Reviews are welcome. For the instructions on preparing a manuscript and the required style and format, please see the Word document "Transactions of NUAAsample.docx". TNUAA pursues a double-blind peer review policy, meaning both the authors and the reviewers remain anonymous to each other. Submissions (including citations) should not contain information that unnecessarily identifies the authors and their affiliations. For questions, please contact Guest Editor Prof. Xiaogang Zhang, and Executive Editor Ms. Chengting Xu. Please notify Prof. Zhang, and Ms. Xu when submitting the manuscript. For anyone who already has a paper under review and wishes to have it considered for this special issue, please send the request to Guest Editors Prof. Zhang, and copy the request to Executive Editor Ms. Xu.

Contact

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*Editorial Office of TNUAA
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