

Call for Papers: Special Issue “Materials for energy technologies: recent developments and trends” in Materials Letters

1. Introduction

The extensive utilisation of energy and depleting fossil fuel sources make it necessary to continuously search for new routes to achieve renewable and sustainable energy sources. In this context, developments of advanced functional materials for energy generation, conversion and storage technologies have critical importance. This area of materials science and engineering comprises multifaceted fields of nanoscience, semiconductor physics, solid-state chemistry, computational sciences, catalysis, electrochemistry and photoelectrochemistry. The widespread applications include, but are not limited to, a variety of solar and fuel cells, batteries, supercapacitors, hydrogen production and storage, conversion of fossil fuels and biofuels, and other emerging technologies. Each of these applications requires unique functional materials. In order to emphasise recent progress in the development of advanced materials for energy-related technologies, **Materials Letters** will publish a new topical issue dedicated to latest achievements and challenges in this area.

The topical special issue entitled “**Materials for energy technologies: recent developments and trends**” will focus on materials research for the energy conversion systems (solar cells, fuel cells, hydrogen production, hydrocarbon fuel conversion, gas separation, thermoelectrics), energy storage (batteries, supercapacitors, hydrogen storage), and energy-saving coatings. The issue will also showcase innovations in electrochromic and piezoelectric materials, superhydrophobic coating technologies and smart hybrid materials. Particular emphasis will be given to novel nanostructured and composite materials for the energy-related applications, theoretical and computational approaches, and new materials processing technologies. The high-quality research articles and reviews, bringing the most recent developments to limelight, is anticipated to gain high visibility among the research fraternity creating a high impact for the issue.

2. Editors:

Guest Editor: Dr. Sudhagar Pitchaimuthu, Swansea University, United Kingdom

Co-Editor: Dr. Sathish Marappan, CSIR-CECRI, India

Co-Editor: Dr. Vladislav Kharton, Institute of Solid State Physics RAS, Russia

3. Important Dates

Final Submission deadline: *31-Dec-2018*

Acceptance deadline: *25-Feb-2019*

4. Submission Guidelines

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES):

<https://eeslive.elsevier.com/mlblue/default.asp>

The authors must select as “SI: Energy-Related Materials” when they reach the “issue” selection step in the submission process.

All submitted papers must be clearly written in excellent English and contain only original work, which has not been published by or is currently under review for any other journal or conference. There is a *strict four-page limit* to printed articles. Manuscripts **must not exceed 2000 words** plus three figures and one table; **the overall length should not exceed 8 pages (including title, abstract, references, figures, tables and figure captions)**. A detailed submission guideline is available as “Guide to Authors” at: <https://www.elsevier.com/journals/materials-letters/0167-577X/guide-for-authors>

All papers will be peer-reviewed by independent reviewers. Requests for additional information should be addressed to the Guest Editor.

<https://www.journals.elsevier.com/materials-letters/call-for-papers/special-issue-materials-for-energy-technologies>