Special Issue

Novel Materials for Sustainable Energy Conversion and Storage

Message from the Guest Editor

This special issue aims the-state-of-the-art resarch reports of novel nanometerials and engineering of device archtectures with advanced manufacturing process for divergent energy conversion and storage applications with high sustainability. The scope of interests includes but is not limited to the following topics:

- Organic, inorganic or hybrid solar cells
- Solar fuel productions
- Electrocatalysts for electrochemical water splitting, CO2 reduction or ammonia (NH3) synthesis
- Cleaning technologies for removal of VOC or other pollutants
- Anode, cathode and seperator materials for secondary batteries
- Nano-sciences and technologies for energy conversion and storage deives
- Manufacturing process for energy conversion and storage deives
- Engineering of device archtecture and structure design for efficient energy conversion and storage

Particularly, this special issue calls for papers on advanced materials and device architectures promoting efficient energy conversion and high capability of energy storage.

Guest Editor

Prof. Dr. Jung Kyu Kim

School of Chemical Engineering, Sungkyunkwan University (SKKU), Suwon, Republic of Korea

Deadline for manuscript submissions

closed (30 April 2020)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/19491

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)