Special Issue

Advanced Heterostructured Materials for Energy-Related Applications

Message from the Guest Editors

The global concerns regarding fossil fuel exhaustion and related environmental degradation have stimulated tremendous research efforts into the exploration and utilization of renewable and clean energy sources. Energy storage and energy conversion are the two most important technologies in today's sustainable and green energy science and have attracted a great deal of attention for daily applications. To date, substantial novel nanomaterials have been extensively explored for these energy-related fields, however, each material has its problems, restricting their ability to fulfill the requirements for high-performance energy storage and convsersion devices. To meet the high technological requirements of future energy-related applications, the development of advanced functional materials is highly desired. Herein, this Special Issue aims to encompass original research works, short communications, and mni-reviews on innovative approaches for the rational design and controllable synthesis of advanced heterostructured materials and their appealing applications in energy related fields (such as rechargeable batteries, supercapacitors, and catalysis, etc.).

Guest Editors

Prof. Dr. Yang Zheng

Prof. Dr. Tengfei Zhou

Dr. Shilin Zhang

Deadline for manuscript submissions

closed (20 June 2022)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/94318

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)