Special Issue

Sustainable Materials for Electrocatalysis and Environmental Catalysis

Message from the Guest Editors

Two-dimensional materials create extensive attention due to their novel electronic properties, large surface area, charging capacity, optical, biocompatible, unique physical and chemical properties. Graphene, MXene, and other two-dimensional (2D) materials represent one of the most popular research areas in energy research and environmental catalysis. Many of these properties are an excellent requirement for an application of electrodes for energy storage and conversion. The applications of 2D materials are not just confined to Opto and nano-electronics but also have strong potential in gas, biosensing technologies, and other environmental applications. Additionally, a large surface of 2D materials provides large storage capacity as compared to the bulk materials. The heterostructures based on 2D materials pay significant attention towards optoelectronics, nanoelectronics, and environmental sensing applications. It is my pleasure to invite all the main researchers in the field of 2D materials to submit contributions. Keywords:

- 2D materials
- sensor
- supercapacitor
- energy conversion

Guest Editors

Prof. Dr. Keng Xu
Dr. Hongxing Jia
Dr. Shun Lu

Deadline for manuscript submissions

closed (20 November 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/131865

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

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
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. 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)