Special Issue

Novel Materials for Green Energy Conversion and Storage

Message from the Guest Editor

Emerging materials for energy conversion and storage offers a comprehensive overview of the latest advancements in materials for energy conversion technologies, including solar cells and fuel cells, as well as energy storage technologies such as batteries, supercapacitors, and hydrogen storage systems. This Special Issue primarily focuses on innovative materials that play a pivotal role in the conversion and storage of renewable energy sources. It delves into advancements that significantly improve the efficiency, durability, and cost-effectiveness of these energy sources. The aim is to develop novel materials that offer improved performance, durability, and cost-effectiveness, thereby making green energy solutions more viable and accessible. This Special Issue welcomes submissions of original research on photovoltaic materials for solar energy, wind turbine materials for wind energy, and electrochemical materials for hydrogen production and storage. Additionally, it explores the sustainability aspect of these materials, emphasizing how they can contribute to a more sustainable and environmentally friendly future of energy.

Guest Editor

Dr. Guang Yang

Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

Deadline for manuscript submissions

closed (10 August 2024)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/194836

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)