



Materials and Processes for Sustainable Energy and Environmental Systems

Guest Editor:

Prof. Dr. Natalia Howaniec

Department of Energy Saving and
Air Protection, Central Mining
Institute, Pl. Gwarkow 1, 40-166
Katowice, Poland

Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editor

The aim of this Special Issue entitled “Materials and Processes for Sustainable Energy and Environmental Systems” is to present the recent advancements in various aspects related to materials and processes contributing to the creation of sustainable power systems and environmental solutions, particularly applicable to clean energy developments. These include materials and engineering processes for clean coal technologies, carbon capture and utilization, hydrogen economy, functional carbon materials, advanced energy materials, as well as waste and by-products valorization in energy systems and environmental engineering.

The authors of full research papers, communications, and review papers are invited to contribute to this Special Issue.

Keywords

- clean energy systems
- carbon capture and utilization
- clean coal technologies
- hydrogen economy
- carbon materials for energy and environmental applications
- energy materials
- waste and by-products valorization in energy and environmental systems





an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)