

## Special Issue

# Recent Research on Energy Storage Materials: Properties and Applications

### Message from the Guest Editor

The pursuit of climate neutrality, intelligent energy utilization systems, including renewable energy, is a challenge for energy storage systems. In this context, the selection of materials for energy storage is an extremely important aspect of the development of materials engineering. I invite all colleagues to present their achievements in the field of materials used in the construction of hydrogen fuel cells, modern material solutions in the construction of hydrogen tanks, material requirements, and the analysis of corrosion processes of materials intended for tanks. Hydrogen as an energy carrier can be bound chemically and physically. Energy storage is also a variety of elements made of components with specific properties. I invite colleagues who deal with the construction or are suppliers of components for electricity storage, such as batteries, inverters, electronics, housings, software, or provide installation, service and warranty services for end products and have interesting experiences in this field to share their research and results. I look forward to your contributions.

### Guest Editor

Dr. Renata Włodarczyk

Faculty of Environmental Engineering and Biotechnology, Czestochowa University of Technology, 42-201 Czestochowa, Poland

### Deadline for manuscript submissions

closed (20 January 2023)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/98738](https://mdpi.com/si/98738)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

[mdpi.com/journal/  
materials](https://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](https://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)