# **Special Issue**

## Advances in Smart Materials for Energy Storage and Conversion

## Message from the Guest Editors

The trending approach to extending the employment of green and renewable energy brings together the scientific community and forces scientists around the world to search for better solutions to meet the significant increase in global energy demand, which is critical for achieving a better and more sustainable future. By connecting materials science with related branches of science, the development in the area of materials for energy storage and conversion is accelerating.

This Special Issue of *Materials* covers topics that combine both experimental and theoretical work in the field of smart materials for energy storage and energy conversion. In this Special Issue, both original research articles and reviews are welcome. Research areas may include but are not limited to the following:

- Materials for fuel cells and electrolyzer cells;
- Oxygen storage materials;
- Mixed ionic-electronic conductors;
- Triple-conducting oxides;
- Synthesis optimization for obtaining nanomaterials;
- Materials for energy harvesting;
- DFT modeling and calculations for materials;
- Photocatalysts for application in the fields of environment and energy.

## **Guest Editors**

Prof. Dr. Kun Zheng

Prof. Dr. Min Chen

Dr. Piotr Winiarz

Dr. Jie Luo

Prof. Dr. Kezhen Qi

## Deadline for manuscript submissions

closed (10 February 2024)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/147593

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)