



an Open Access Journal by MDPI

## Novel Electrochemical Materials for Energy Storage and Conversion

Guest Editor:

**Dr. Carlos Ponce de León  
Albarrán**

Energy Technology Group within  
Engineering and the Environment  
at the University of  
Southampton, Southampton, UK

Deadline for manuscript  
submissions:

**closed (15 December 2017)**

### Message from the Guest Editor

The aim of this Special Issue is to cover from traditional and fundamental concepts to cutting edge technologies used to manufacture, test and employ different materials for energy storage and conversion. Interested areas include, but are not limited to:

- noble metal nanomaterials electrodes,
- metal oxide composites for electrochemical capacitors,
- carbon (ordered mesoporous materials) and carbon fibres,
- graphitic nanomaterials,
- aqueous and non-aqueous electrolytes,
- ion exchange membranes and microporous separators,
- turbulence promoters,
- current collectors,
- redox active materials,
- active electrodes such as carbon nanotubes, metals oxides, conductive polymers and nanocomposites
- electrode materials for microbial fuel cells.

The focus is also on current progress in energy storage including: Battery development, energy storage from renewable sources, new energy sources for transport and specific fields of portable devices, redox flow cells and electrochemical engineering.



[mdpi.com/si/10203](https://mdpi.com/si/10203)



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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)