

Special Issue

Electrochemical Processes, Materials and Devices

Message from the Guest Editors

Electrochemistry is gaining significant interest among researchers, engineers, students, and the general scientific community, as it is ubiquitous. A great number of life processes are found to be electrochemical. Important issues, such as cell function and signal transition in the nervous system, technologies for renewable energy conversion, batteries, fuel cells, production of ecologically friendly high-quality materials, processing and pyro-processing of wastes, corrosion protection, and many others, have been developed and studied through electrochemical methods and techniques. This Special Issue entitled "**Electrochemical processes, materials and devices**" welcomes full research papers and reviews focused on:

- Kinetics and thermodynamics of electrode processes on solid and molten electrodes in molten salts;
- Pyrochemical technologies and spent nuclear fuel recycling;
- Production of metals and alloys by electrolysis of fluoride, chloride and oxide melts: processes and electrolytic cells;
- Development of promising functional materials for next-generation solid oxide electrochemical devices: properties and structure;

Guest Editors

Prof. Dr. Yuri Zaikov

Dr. Pavel Arkhipov

Dr. Dmitry Medvedev

Dr. Oksana Rakhmanova

Deadline for manuscript submissions

closed (31 March 2023)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/118858

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)