Special Issue

Advanced Functional Materials for Hydrometallurgical and Environmental Applications

Message from the Guest Editors

Advanced functional materials have been broadly appiled in hydrometallurgy and environment-related fields. On the one hand, functional materials have been exploited by researchers to separate and enrich valuable metals from the complex leaching solutions of low-grade metal ores and secondary resources. On the other hand, these materials have also been adopted for the sepration and removal of heavey metals, harmful gases, or organic pollutants exposed in the environment. This Special Issue on 'Advanced Functional Materials Used for Hydrometallurgical and Environmental Applications' aims to explore the preparation, characterization, and application of advanced functional materials in hydrometallurgical and environmental protection processes. This Special Issue is mainly focused on solvent-impregnated resins, supported ionic liquids, composite electrode materials, ion-imprinted polymers, solid wastes based on adsorption materials, etc. It encourages thorough research on the reveal of adsorption mechanisms based on quantum chemistry simulation and other multidisciplinary approaches.

Guest Editors

Dr. Bo Chen

School of Resources and Environmental Engineering, Wuhan University of Technology, Wuhan 430070, China

Prof. Dr. Shenxu Bao

School of Resources and Environmental Engineering, Wuhan University of Technology, Wuhan 430070, China

Deadline for manuscript submissions

20 November 2025



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/199525

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)