

Special Issue

Advances in Materials and Technologies for Water Splitting

Message from the Guest Editor

This Special Issue focuses on recent innovations in materials and technologies that enhance the efficiency, stability, and practical performance of water splitting. We welcome submissions related to electrocatalysts, membranes, porous transport layers, protective coatings, cell and system designs, advanced characterization techniques, and modeling approaches in both acidic, alkaline and seawater environments. Studies offering new insights into reaction mechanisms, novel material fabrication strategies, or improved performance under realistic operating conditions are particularly encouraged. By bringing together research from materials science, electrochemistry, and engineering, this Special Issue aims to provide a clear and comprehensive overview of emerging strategies that support the development of high-performance water splitting systems. We invite researchers working on fundamental studies, applied technologies, or industrially relevant systems to submit original research articles and reviews.

Guest Editor

Dr. Jing Ma

Department of Materials Science and Engineering, Monash University, Clayton, VIC, Australia

Deadline for manuscript submissions

20 July 2026



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2

CiteScore 6.4

Indexed in PubMed



mdpi.com/si/262903

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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