

Special Issue

Research Progress of Halide Perovskite Materials for Photovoltaic Applications

Message from the Guest Editors

In recent years, organic–inorganic halide perovskites have garnered significant attention due to their remarkable photovoltaic performance. These materials possess a range of exceptional properties, including tunable band gaps, low exciton binding energies, long charge carrier recombination lifetimes, and defect tolerance. Collectively, these features make them outstanding candidates for solar cell applications.

This Special Issue aims to bring together research papers, short communications, perspectives, and review articles focusing on understanding the phenomena that contribute to the exceptional performance of halide perovskites in photovoltaic applications. Submissions may include experimental and computational studies, whether combined or separate. Additionally, studies on novel fabrication techniques and innovative device designs are welcome to provide a comprehensive overview of the state of the art in the field.

Guest Editors

Dr. Ariadni Boziki

Department of Physics and Materials Science, University of Luxembourg, L-1511 Luxembourg City, Luxembourg

Dr. Jérémy Hieulle

Department of Physics and Materials Science, University of Luxembourg, L-1511 Luxembourg City, Luxembourg

Deadline for manuscript submissions

20 March 2026



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/209412

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)