Special Issue

Progress on Performance Improvement of Perovskite Solar Cells and Modules

Message from the Guest Editor

Photovoltaics (PV) plays a key role in the renewable energy transition to achieve net-zero greenhouse gas emission within this century. To meet the terawatt energy production demand, more innovations will be needed to improve cost-effectiveness of fabrication processes with less energy input, shortened processing time and low-cost materials. Metal halide perovskite solar cells present an emerging high efficiency technology with low cost and a wide range of application potential. This Special Issue aims to publish high quality original research and review papers on progresses in perovskite materials and device/module performance and stability. Although the focus is on the single junction cell and module technology, advanced concepts and more diversified new deployment applications such as multi-junction devices, light management and structure integrated PV are also important topics of this Special Issue.

Guest Editor

Dr. Shujuan Huang
School of Engineering, Macquarie University, Sydney, NSW, Australia

Deadline for manuscript submissions

closed (10 June 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/87930

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

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

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)