

Special Issue

Novel Approaches for High-Efficiency Perovskite Solar Cells

Message from the Guest Editor

This Special Issue aims to explore the latest advancements and innovative methodologies that enhance the performance and longevity of perovskite-based solar devices. Given the urgency to transition towards renewable energy sources, these novel approaches are critical in addressing the global energy challenge and in advancing the commercial viability of perovskite-based technologies. The topics of interest for publication include, but are not limited to, the following:

- The development of new perovskite compositions;
- Novel fabrication techniques;
- Stability improvement strategies;
- Scalability processes;
- Integration into other types of solar systems.

The subject of interest is not limited to single-junction structures, but also tandem configurations such as all-perovskite tandems and perovskite–silicon tandems. We invite contributions that provide insights into the theoretical modeling, experimental verification, and practical applications to propel the future of sustainable energy solutions.

Guest Editor

Dr. Pengchen Zhu

School of Sustainable Energy and Resources, National Laboratory of Solid State Microstructures, Jiangsu Key Laboratory of Artificial Functional Materials, Frontiers Science Center for Critical Earth Material Cycling, Nanjing University, Nanjing 210023, China

Deadline for manuscript submissions

24 December 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/230140

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)