

Special Issue

Perovskite Solar Cells and Tandem Photovoltaics

Message from the Guest Editor

Perovskite solar cells (PSCs) based on various materials, such as all-inorganic and organic–inorganic perovskite-based light-absorbing materials, have shown great potential for high-efficiency photovoltaic applications. The performance of these devices depends on several factors, such as light absorption, the bandgap of the materials, charge carrier dynamics and transport, and the interfacial charge transfer phenomenon. Understanding these factors is essential for improving the stability and commercial viability of this astonishing technology. Moreover, developing new materials, mechanisms of research, and device architecture with improved efficiency and stability of perovskite and perovskite-based tandem solar cells is also highly desirable. We are particularly interested in papers that explore the development of new materials, device architectures, and improved photovoltaic and optoelectronic characteristics of perovskite and perovskite-based tandem solar cells. This Special Issue aims to provide a comprehensive overview of the current state of the art and future perspectives in this field. We welcome your submissions to this Special Issue.

Guest Editor

Dr. Jongchul Lim

Graduate School of Energy Science and Technology, Chungnam National University, Daejeon 34134, Republic of Korea

Deadline for manuscript submissions

30 June 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.2



mdpi.com/si/198714

Energies

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 3.0
CiteScore 6.2



[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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)