

Special Issue

Advanced Materials for Solar Photovoltaic Technologies

Message from the Guest Editor

Advanced materials are key for enhancing the efficiency, durability, and cost-effectiveness of PV systems, driving the evolution of clean energy solutions. This Special Issue encompasses a broad spectrum of topics, including:

- Emerging Photovoltaic Materials: Exploration of novel materials such as perovskites, quantum dots, and 2D materials for high-efficiency solar cells;
- Thin-Film Photovoltaics: Innovations in amorphous silicon, cadmium telluride, and CIGS technologies;
- Plasmonic and Nanostructured Materials: Utilization of nanoparticles and nanostructures for light trapping and enhanced optical properties;
- Durability and Stability Improvements: Strategies to enhance the operational stability and environmental resilience of PV materials, particularly under harsh conditions;
- Materials for Tandem and Multi-Junction Cells: Development of materials that enable higher efficiency through tandem configurations;
- Sustainable and Recyclable Materials: Focus on eco-friendly and recyclable materials that reduce the environmental footprint of PV production.

Guest Editor

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Deadline for manuscript submissions

closed (25 June 2025)



Energies

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Impact Factor 3.2
CiteScore 7.3



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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.

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