

Special Issue

Advances in Photovoltaic and Renewable Energy Engineering

Message from the Guest Editors

Research on renewables is crucial for addressing climate change. Solar energy is especially abundant and widely accepted for automotive and mobility electrification. To fully utilize solar energy, we need energy vectors that can manage its unpredictable availability. Transforming solar energy into carbon-free molecules, such as H₂ and NH₃, is gaining attention as a means to produce climate neutral solar fuels. This Special Issue will focus on advancements in high-performance photovoltaics and the synthesis and management of solar fuels. Topics of interest include, but are not limited to, new processes, materials, and devices.

- Sustainable materials for PV and solar fuel technology;
- High-performance solar cells;
- High-performance photovoltaic modules;
- Solar fuels;
- Photoelectrochemical cells;
- Solar-to-hydrogen systems;
- Solar-to-ammonia systems;
- Hydrogen storage;
- Interaction between electrochemical systems and fluctuating renewables;
- Electronics for photovoltaic modules.

Guest Editors

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Deadline for manuscript submissions

closed (13 May 2025)



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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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