

Special Issue

Efficient and Reliable Solar Photovoltaic Systems: 2nd Edition

Message from the Guest Editors

This Special Issue focuses on conversion, control, and power electronics architectures for monitoring and ensuring the optimal and safe production of PV systems. Topics of interest for publication include, but are not limited to, the following:

- Isolated and non-isolated DC–DC converter architectures for PV systems;
- Modeling and control for optimal electrical energy production by PV systems;
- The design and optimization of efficient converters for PV systems;
- Multi-input DC–DC converters for PV systems with energy storage;
- Maximum power point tracking techniques;
- Differential power processing converter architectures in PV systems with mismatched modules;
- Distributed converter architectures at the PV module level;
- Fault diagnosis and the fault-tolerant control of converter architectures for PV systems;
- PV systems with fault-tolerant capabilities—power and energy architectures, energy management, advanced control methods for healthy and faulty conditions, and islanded PV systems.

Guest Editors

Prof. Dr. Philippe Poure

Institut Jean Lamour (UMR7198), Université de Lorraine, Campus Artem, BP 50840, F-54511 Nancy, France

Prof. Dr. Shamsodin Taheri

Département d'Informatique et d'Ingénierie, Université du Québec en Outaouais, Gatineau, QC J8X 3X7, Canada

Deadline for manuscript submissions

20 July 2026



Solar

an Open Access Journal
by MDPI

CiteScore 4.3
Tracked for Impact Factor



mdpi.com/si/245223

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

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





Solar

an Open Access Journal
by MDPI

CiteScore 4.3
Tracked for Impact Factor



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



About the Journal

Message from the Editor-in-Chief

Solar is a new international, open access journal for solar technologies. Climate change is real! Therefore, fast and wide-spread application of solar technologies is of utmost importance. Consequently, *Solar* aims to publish articles which make a real, influential, and often cited contribution not only to basic research and development, but also to the application of photovoltaics as well as to solar thermal conversion. In addition, articles discussing the politics, economy, environmental, and social issues of solar technologies are also welcome. We encourage authors to submit high-quality original articles, letters, and review articles. Our editorial and technical team guarantees a high-quality, fast reviewing process, fast publication, and promotion. With your articles, our journal will rank among the best soon!

Editor-in-Chief

Prof. Dr. Jürgen Heinz Werner
Institute for Photovoltaics and Research Center SCoPE, University of
Stuttgart, 70569 Stuttgart, Germany

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within ESCI (Web of Science), Scopus and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))