

Special Issue

Recent Advances in Solar Photovoltaic Protection

Message from the Guest Editors

Recently, there has been a rapidly growing trend towards the use of photovoltaic (PV) solar energy generation as a clean and easy-to-access energy source. As most PV components work in open environments, they are constantly subjected to environmental damage, including the destructive effects of chronic exposure to sunlight, dust, etc. This eventually leads to the improper operation of a PV system due to various faults and failures that can be either electrical or non-electrical. The results can vary from a relative power loss in PV systems to catastrophic consequences, such as fire hazards. Hence, the protection of PV components is of particular importance.

This Special Issue aims to publish high-quality papers on recent advances in the field of PV system protection, including the integration of artificial intelligence, digital twins, the Internet of things, etc. Potential topics include, but are not limited to, PV system fault detection, photovoltaic digital twin modelling, PV system predictive and preventive protection, PV system resilience and restoration, and recent techniques in photovoltaic feature engineering.

Guest Editors

Prof. Dr. Mohammadreza Aghaei

1. Department of Ocean Operations and Civil Engineering, Norwegian University of Science and Technology (NTNU), 6009 Ålesund, Norway
2. Solar Energy Engineering Program, Department of Sustainable Systems Engineering (INATECH), Albert Ludwigs University of Freiburg, 79110 Freiburg, Germany

Dr. Aref Eskandari

Department of Electrical Engineering, Iran University of Science and Technology (IUST), Tehran 13114-16846, Iran

Deadline for manuscript submissions

closed (20 April 2025)



Solar

an Open Access Journal
by MDPI

CiteScore 4.3
Tracked for Impact Factor



mdpi.com/si/218246

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))