Special Issue

PV Cell and Module Measurement Techniques

Message from the Guest Editors

In recent years, there have been revolutionary changes in the architecture of crystalline silicon modules for PV cells' realization. More sophisticated assembly schemes have been proposed to reduce cell-to-module losses related to dead zones, and resistive losses have been reported. Increasing the availability and efficiency of PV systems during the useful life of the photovoltaic field imposes monitoring and diagnostic techniques, which are capable of identifying and eliminating the anomalous conditions related to failure. As linear power performance warranties on modules have become commonplace in the PV industry, the power plants are scanned at regular intervals to identify underperforming PV modules for replacement. Environmental measurements and electrical/thermal measurements of PV cells and modules play a fundamental role in modeling and optimizing the performance of photovoltaic cells and modules, both in the laboratory and in the field. In the latter case, the problem of reporting measurements under reference conditions is a crucial issue when analyzing long-term aging phenomena.

Guest Editors

Prof. Dr. Giuseppe Marco Tina

Dipartimento di Ingegneria Elettrica, Elettronica e Informatica, University of Catania, Viale A. Doria, 69515 Catania, Italy

Prof. Dr. Salvatore Graziani

Department of Electrical, Electronics and Computer Engineering (DIEEI), University of Catania, Viale Andrea Doria 6, 95125 Catania, Italy

Deadline for manuscript submissions

closed (31 January 2023)

Solar

an Open Access Journal by MDPI

CiteScore 4.3

mdpi.com/si/99426

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

mdpi.com/journal/solar

Solar

an Open Access Journal by MDPI

CiteScore 4.3

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 Scopus and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

MDPI