

Special Issue

Photovoltaic Power Generation Systems

Message from the Guest Editors

PV power plants of hundreds of MWp became the new standard in recent years, placing solar PV as the first-choice renewable energy to face global climatic change in the coming decades. With the progress of PV technology and the reduced power tolerance, expected energy production faces depreciated external factors: irregular terrains, which may enlarge the mismatch losses due to the misalignment of the modules, areas more prone to soiling due to the local wind patterns and wind variations, which may induce thermal stress in the PV modules, affecting the lifespan of the PV plant. These are some examples that may affect the costs of new projects regarding the initial inversion and lifespan of a PV power plant, as well as the maintenance logistic in the PV plant or floating solar. For this Special Issue, original research articles and reviews are welcome. Specific research areas to be covered may include (but are not limited to) the following:

- PV solar power plants
- PV modules
- aging
- PV thermal behaviour
- soiling
- PV applications
- quality control
- PV measurements
- monofacial and bifacial PV generators
- floating PV

Guest Editors

Dr. Carlos Henrique Rossa

Climate Physics Group, Department of Physics and Mathematics,
University of Alcalá, 28801 Alcalá de Henares, Spain

Dr. Paula Varandas Ferreira

ALGORITMI Research Center, University of Minho, Campus de Azurém,
Guimarães, 4710-057 Braga, Portugal

Deadline for manuscript submissions

closed (10 December 2023)



Electricity

an Open Access Journal
by MDPI

CiteScore 4.8
Tracked for Impact Factor



mdpi.com/si/153558

Electricity

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electricity@mdpi.com

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





Electricity

an Open Access Journal
by MDPI

CiteScore 4.8
Tracked for Impact Factor



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



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Andreas Sumper
CITCEA-UPC, Department of Electrical Engineering, Universitat
Politecnica de Catalunya, 08028 Barcelona, Spain

Author Benefits

High Visibility:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 27.9 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2024).

Journal Rank:

CiteScore - Q2 (Electrical and Electronic Engineering)