Special Issue

Power Converters for Photovoltaic Energy Processing: Topologies, Control and Applications

Message from the Guest Editors

This special issue aims at reporting original research in various aspects of power converters as enabling technology for efficient utilization of PV power generation systems. Topics of interest include, but are not limited to, the following:

- DC-DC converter topologies for PV applications;
- Integrated PV cell-converter architectures;
- Circuital models of PV arrays;
- Maximum power point tracking algorithms;
- Inverter topologies for PV applications;
- Inverter modulation and control for ancillary services (e.g., power quality)
- Ride through and various grid support algorithms during faults (e.g., transient stability enhancement)
- Integrated PV power plants plus storage;
- PV power plants for electric vehicle charging;
- Artificial intelligence for control and optimization of PV systems;

Please click here to find more information! Welcome to contribute!

Guest Editors

Dr. Fabio Corti

Dr. Francesco Riganti-Fulginei

Dr. Fernando Mancilla-David

Deadline for manuscript submissions

closed (31 December 2021)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/76124

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

