



Digitalization and Advanced Control Techniques of Integrated Photovoltaic Systems

Guest Editors:

Dr. Ibrahim Anwar Ibrahim

School of Electrical and Data Engineering, University of Technology Sydney, Sydney 2007, Australia

Dr. Nabil Mohammed

Faculty of Engineering, Monash University, Melbourne 3800, Australia

Prof. Dr. Jahangir Hossain

School of Electrical and Data Engineering, University of Technology Sydney, Sydney, NSW 2007 (PO Box 123), Australia

Deadline for manuscript submissions:

closed (15 February 2023)



Message from the Guest Editors

Dear Colleagues,

The rapid increase in photovoltaic (PV) installation at small and large scales can pose significant technical issues related to the voltage levels and capacity of the network assets in distribution networks. New solutions and digitalization of energy systems, especially PV systems, must be developed to support decision making and improve generation capacity and efficiency.

This Special Issue includes (but not limited to) the following topics:

- State-of-the-art reviews on integrated PV systems and applications.
- On-line and off-line PV system performance forecasting methods.
- PV system sizing and optimization.
- Energy management of PV systems.
- AI applications for PV systems.
- Cybersecurity of Digital PV Systems.
- Power converter topologies for PV systems.
- Grid-following inverter controls.
- Grid monitoring and synchronization techniques for 1ph/3ph PV systems
- Fault ride-through enhancement for grid-tied PV systems
- Integration of storage batteries with PV systems.

Looking forward to your contribution!!

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

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

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.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Electrical and Electronic Engineering*) CiteScore - Q2 (*Electrical and Electronic Engineering*)

Contact Us

Electronics Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://x.com/electronicsMDPI)