

Special Issue

Advances in Photovoltaic Systems: Modelling, Power Converters and Applications

Message from the Guest Editors

The aim of this Special Issue is to publish original high-impact research and reviews of PV systems, with a particular focus on modelling, power converters and applications. Topics of interest may include (but are not limited to) the following areas:

- PV cell/module models capable of representing the I-V behaviour under different environmental conditions;
- Monitoring, detection, classification and/or localization of failures and degradation modes of PV modules, strings and/or arrays;
- Distributed maximum power point tracking (DMPPT) converters (also known as solar optimizers): series-connected and parallel-connected DC-DC converters configurations;
- High-gain DC-DC power converter topologies, modelling and control;
- Partial power DC-DC converter configuration, topologies, modelling and control;
- Differential power processing (DPP) converter configurations, topologies, modelling and control;
- Single-phase and three-phase PV inverter topologies and modulation for leakage current reduction;
- Hybrid PV inverters: battery management, converter topology, modulation, modelling and control;
- Global MPPT for PV systems under partial shading conditions.

Guest Editors

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Deadline for manuscript submissions

closed (27 February 2024)



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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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