

Special Issue

Control and Protection Issues of Grid-Tied Photovoltaic System

Message from the Guest Editors

Solar photovoltaic (PV) power is increasing rapidly, more than expectations and earlier forecasts. During 2017, 100 GW of PV was installed worldwide, giving a cumulative capacity of 401 GWp. This growth will continue in the next decade, which will create a great deal of control and protection challenges for grid operators. Handling intermittency, maximum power extraction during partial shading condition, minimizing loss by maximizing efficiency of inverter/converter, protecting power converters from over and under voltages as well as during grid faults, enhancing fault ride through capabilities, etc., are the prime challenges to be addressed. Transformerless grid interfacing is identified as another important issue to be solved by researchers. This Special Issue invites paper from academic, industry leaders, and researchers on the aforementioned areas.

Keywords

Partial Shading
MPPT Control
PV Inverter/Converter Topology
Control of Power Electronic Converter
Overvoltage/undervoltage protection
Fault ride through

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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