



Power Systems: Protection and Connection with Converters

Guest Editor:

Prof. Dr. Vijay Sood

Department of Electrical,
Computer and Software
Engineering, Ontario Tech
University, Oshawa, ON L1G 0C5,
Canada

Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editor

Dear Colleagues,

The integration of intermittent renewable energy sources (such as solar and wind) into microgrids requires the use of power electronic converters with sophisticated controllers to maximise their energy recuperation. There are major problems with the use of such power electronic converters. They have limited thermal ratings and contribute little, if any, rotational inertia to the microgrids that they are connected to. The lack of injected rotational inertia makes these microgrids particularly vulnerable to instability issues. Special protection and control strategies are therefore needed to efficiently and fully utilize such converters in the integration of intermittent renewable energy sources. These power electronic converters can have the role of either grid following or grid forming. Modern control techniques can enable these converters to provide virtual inertia to overcome instability issues. This Special Issue will deal with many of these topics.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)