

Special Issue

Power Converters: Modeling, Control, and Applications

Message from the Guest Editors

Continuously expanding deployments of power electronic systems are transforming the legacy power system into a pure power electronic-based power system. As the generated electrical energy is usually a semi-finished product, its appropriate adaptation and conversion is required. The conversion, often with several stages, is carried out by power electronic converters. Progress in the field of technology, available materials and components, new topologies, advanced methods of analysis, modeling, control, and design has a positive impact on the properties of power converters. This Special Issue aims to share the latest advances in power converters. Topics of interest include but are not limited to: Converters for uninterruptible power supplies; Converters for motor drives; Bidirectional power converters; High-power density converters; High-efficiency converter topologies; Power harmonic filters and power quality; Advanced control and reliability of converters; Modeling and simulation of converters; Electromagnetic compatibility in power converters; Power converters interaction and stability analysis and enhancement; Modern components in power converters; Renewable energy systems.

Guest Editors

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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.

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