Special Issue

Advanced Technologies in Grid-Connected Inverters and Converters

Message from the Guest Editors

With the rapid growth of renewable power generation, grid-connected inverters and converters are playing an increasingly critical role in power and microgrid systems. The conventional power system is evolving into a power electronics-enabled power system. Developments in power electronics-enabled power systems also create new challenges, such as novel power electronic topologies, modulation techniques, modeling and control of grid-connected inverters and converters. This Special Issue will deal with novel power electronic topologies, modulation and control techniques, and different challenges in power electronics-enabled power systems and so on. Particular topics of interest include, but are not limited to, the following:

- Novel power electronic topologies of grid-connected applications;
- Modulation techniques of grid-connected inverters and converters;
- Modeling and control of grid-connected inverters and converters;
- Dynamic stability analysis of grid-connected inverters and converters;
- Approaches for resilience enhanced optimal operation methods of the grid-connected applications;
- Schemes for power quality enhancement of the grid-connected applications.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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