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Application of Power Electronics Converters in Smart Grids and Renewable Energy Systems

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Message from the Guest Editors

Conventional power systems worldwide have experienced a significant transformation, which has been strongly characterized by an increased penetration of power electronic converter interfaced technologies. Among these new technologies are wind, tidal, fuel cell and photovoltaic generation, various storage technologies, FACT devices, HVDC lines, and power electronic interfaced loads. This Special Issue intends to present advanced methods involved in the applications of power electronic converters in smart grids and renewable energy systems.

Prospective authors are invited to submit original contributions for publication in this Special Issue. Topics of interest include, but are not limited to:

- Electric and hybrid vehicles;
- High-voltage DC (HVDC) systems;
- Flexible AC transmission system (FACTS) devices;
- Grid planning with large-scale renewable energy resources;
- Bulk energy storage;
- Uninterruptible power system (UPS);
- Modeling of large-scale PV and wind farms;
- Islanded and grid-connected microgrids;
- Fuel cell-based energy systems.









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Message from the Editor-in-Chief

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