



Power Quality Conditioning and Stability Enhancement of More-Electronics Power Systems

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Along with the large-scale employment of power converters, power quality issues and stability problems are emerging and evolving. Despite being major trouble sources, grid-tied power converters are promising solutions to such problems mostly due to their flexible and strong control.

This Special Issue focuses on the enhancement of power quality and stability of modern power systems through power-electronic-based solutions. The topics of presentations and research papers include, but are not limited to, the following:

- Modeling, control, and design of grid-forming power conversion systems;
- Inertia emulation and fast frequency control via power converters and energy storage;
- Synchronization of multiple grid-tied converters;
- Smart converters with stability enhancement and power quality conditioning;
- Virtual synchronous machines (VSMs) and virtual oscillators;
- Real-time control and optimization of 100% power-electronic-coupled power systems;
- Next-generation grid codes and standards.





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Message from the Editor-in-Chief

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