Special Issue

Applications of Power Electronic Circuits and Systems for Future Grid

Message from the Guest Editor

Power electronics plays a vital role in integrating various renewable energy resources to the grid to meet the current energy crisis. The smart grid is an enhanced version of the conventional electricity grid which enables energy security, reliability and integration of various renewable energy resources. Therefore, the future smart grid will pave the way for CO2 reduction and clean energy deployment. This Special Issue will focus on recent trends and innovation in power electronic circuits and systems for future grid. The topics of interests include, but are not limited to, the following:

- Fault-tolerant converters for renewable energy
- Electric vehicle charging
- Power electronics for microgrids
- Power electronic applications in smart grid
- Power electronics for offshore windfarm integration
- Advanced power electronic interfaces for PV
- Energy storage systems
- Smart inverters
- High-power density converters
- Distributed energy resource control and integration
- Fault-ride through capability of advanced power converters

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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