



High-Efficiency and High-Performance Power Electronics for Power Grids and Electrical Drives II

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Message from the Guest Editors

Dear Colleagues,

Power electronics has radically transformed the way we condition electrical energy in both stationary and non-stationary applications. Power electronics is also crucial to implement efficient demand response and power flow management, especially in micro/nanogrids, which are progressively shifting from AC to DC distribution. Other interesting and efficient devices are smart transformers.

Building on these premises, this Special Issue will address converter topologies and control techniques aimed at improving efficiency and performance of power electronics applications in power grids and electrical drives. Topics of interest for publication include, but are not limited to:

- Advanced power converter topologies
- Power converters with very high voltage gain
- Wide bandgap devices and drivers
- Advanced control and modulation strategies for power converters and electrical drives
- Model Predictive Control
- Electrical Loss Minimization Techniques (ELMT)
- Maximum Torque Per Ampere (MTPA) techniques
- Power electronics for DC distribution
- Smart microgrids/nanogrids
- Smart transformers
- Efficient converters for Energy Storage Systems





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Message from the Editor-in-Chief

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