

Special Issue

Power Electronics for Renewable Energy Systems

Message from the Guest Editors

Power electronics is a key technology for use of renewable power generation in our societies. These devices convert electricity from one stage to the other stage, which leads to a power electronic-based power system. By this assumption, several technical challenges will be appeared in power grids, regarding the reliability and stability of grid under high penetration of power electronic-based power generators. To meet these challenges in future grids, a new research platform is needed for design and test of power electronic-based generators and their integration with the power grid. This special issue aims to explore the new strategies for overcoming the technical challenges of grid integration of renewable energy systems, such as synchronization of interfaced converters with power grid, operation and control of different power converters in power systems, and stability analysis of power grid under large shares of renewable energies. For further reading, please visit the [Special Issue Website](#)

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