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Power System Simulation with Renewable Power: Protection, Optimization and Control

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Message from the Guest Editors

Undoubtedly, renewable energy sources (RES) have changed traditional transmission grids and represent a significant electricity resource in modern power systems. This Special Issue will present the latest research developments and practical applications in the field of protection, control, and optimization in new scenarios for future power systems. These include, in particular but not exclusively:

- Modeling, design, analysis, and control of lowpower and high-power converters for renewable energy conversion and their interconnections;
- Design and control of intelligent power plants for future power grids;
- Modelling, control, and simulation of battery-based energy storage systems integrated in renewable plants;
- Optimization algorithms for energy management and intelligent control of RES plants in distribution grid:
- Planning and operation of renewable power systems;
- Analysis and control of DC and hybrid AC/DC power networks;
- Diagnostics, maintenance, risks, reliability, vulnerability, and self-healing of grids;
- Big data analysis.



Specialsue







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Message from the Editor-in-Chief

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