



## Advances in Resilient Operation, Optimization, and Control of Smart Grids and Microgrids

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### Message from the Guest Editors

Dear Colleagues,

Recently, smart grids and microgrids have gained much importance with advancements in distributed energy resources (DERs), renewable energy, computing, communication, and artificial intelligence technologies. Microgrids are finite-inertia power systems that integrate distributed generation to include renewable energy resources, energy storage, and loads. Smart grids are prone to cyber-attacks due to extensive reliance on computing and communication technologies. This has given rise to research in the resilient operation, optimization, and control of microgrids and smart grids.

In this context, this Special Issue aims to present and disseminate the most recent advances related to techniques for resilient operations, optimization, and control of microgrids and smart grids. The topics of interest for publication include but are not limited to:

- All aspects of resilient operations for microgrids and smart grids under cyber-attacks and faults;
- Power systems optimization;
- Distributed cooperative control of microgrids and smart grids;
- Artificial Intelligence-based resilient microgrids.





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## Message from the Editor-in-Chief

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