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# Advances in Simulations and Analysis of Electrical Power Systems: Enhancing Efficiency, Reliability and Sustainability

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## **Message from the Guest Editors**

Dear Colleagues,

The field of electrical power systems has undergone significant advancements in recent years, driven by the need for efficient and sustainable energy solutions. Simulation and analysis techniques play a crucial role in understanding, optimizing, and enhancing the performance of electrical power systems.

The Special Issue invites contributions that address various aspects of simulation and analysis in electrical power systems. Topics include, but are not limited to:

- Advanced simulation techniques for power system modeling and analysis
- Optimization algorithms and tools for power system operation and planning
- Integration of renewable energy sources in power system simulations
- Simulation-based studies on grid stability, reliability, and resilience
- Analysis of power system dynamics and control strategies
- Simulation and analysis of smart grid technologies and architectures
- Simulation-based studies on demand response and energy management systems
- Impact analysis of electric vehicles and energy storage systems on power grids







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### Message from the Editor-in-Chief

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