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Operation Optimization and Security Analysis of Energy Cyber Physical Systems

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Message from the Guest Editors

Dear Colleagues,

Due to their rapid integration with advanced sensing, monitoring, communication and control technologies, energy systems have now emerged as typical cyber physical systems (CPSs). This Special Issue is devoted to reflecting on the latest progress and key technologies concerning ECPSs, focusing on their modelling, analysis, optimization, control and demonstration.

Topics of interest for publication in this Special Issue include, but are not limited to:

- Interaction mechanisms and models of ECPSs;
- Operation optimization of ECPSs;
- Coordination control of ECPSs;
- Situational awareness for ECPSs;
- Reliability, risk, vulnerability and resilience assessments for ECPSs;
- Cyber security analysis of ECPSs;
- Attack detection and defence of ECPSs;
- Early warning, fault diagnosis and service restoration of ECPSs;
- Market transaction and supervision of ECPSs;
- Application of artificial intelligence and big data in ECPSs;
- Application of cloud computing and secure multiparty computation in ECPSs;
- Verification and demonstration of ECPSs.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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