



Cyber Physical Fusion-Based Defect Perception, Fault Diagnosis, and Reliability Analytics in Power Systems

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Message from the Guest Editors

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This Special Issue seeks to solicit original research articles as well as review articles. Potential topics include, but are not limited to:

- Advanced digital signal processing methodologies for big data to solve the Prognostic and Health Management (PHM) problem of power equipment;
- Real-time defect detection and performance evaluation based on physical information for critical components in power generation scenarios;
- Data-driven health indicator and threshold representation methodologies for fault detection, diagnosis, and isolation;
- AI-based approaches for fault diagnosis of renewable power generation plants;
- Advanced fault informative feature (e.g., time-domain analysis and time-frequency domain) representative methods for local defect detection;
- Spectrum-based capability evaluation of noise disturbance robustness, and weak diagnostic signal enhancement;
- Applications of AI techniques to imbalanced fault label recognition, and fault diagnosis problems under small sampling data;
- Big data analysis and processing of the PHM of power equipment combined with Industrial IoT.





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Message from the Editor-in-Chief

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