

## Special Issue

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

### Message from the Guest Editors

[www.mdpi.com/journal/electronics/special\\_issues/1ATE5P91JS](http://www.mdpi.com/journal/electronics/special_issues/1ATE5P91JS) 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.

### Guest Editors

Dr. Xian-Bo Wang

Dr. Zhi-Xin Yang

Dr. Yunfeng Yan

### Deadline for manuscript submissions

closed (15 May 2024)



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## About the Journal

### Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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### Editor-in-Chief

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