Special Issue

Advanced Fault Monitoring for Smart Power Systems

Message from the Guest Editor

As the integration of renewable energy sources and advanced technologies continues to transform power systems, ensuring their reliability and resilience becomes increasingly crucial. By combining the capabilities of smart grids and fault analytics, researchers are pioneering novel techniques, accurate diagnosis, and effective mitigation strategies. Moreover, the integration of artificial intelligence and IoT devices is revolutionizing fault monitoring practices in advanced power systems, enabling proactive maintenance and minimizing downtime. This Special Issue focuses on innovative technologies aimed at enhancing power network reliability. A wide range of topics on fault mitigation and detection, including data-driven fault detection algorithms, machine learning approaches, sensor technologies, and real-time monitoring systems, are covered in this Special Issue for the readers.

- power system resilience
- fault detection and mitigation
- cybersecurity and smart grids
- IoT and sensor technologies for power networks
- big data analytics and real-time monitoring
- proactive and predictive maintenance
- AI and blockchain for power systems
- renewable energy integration

Guest Editor

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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