Special Issue

Fault Diagnosis Based on Sensing and Control Systems

Message from the Guest Editor

The advancements in sensor technologies have significantly enhanced the capabilities of fault diagnosis across various industries. These technologies enable the precise detection and analysis of system anomalies, leading to improved reliability and efficiency. This Special Issue aims to consolidate the latest research and developments in fault diagnosis based on sensing and control systems. We seek to explore innovative approaches and methodologies that leverage intelligent sensing, multisensor fusion, predictive maintenance, real-time fault detection, adaptive control systems, and the application of machine learning and artificial intelligence in fault diagnosis. We invite contributions that delve into theoretical frameworks, computational models, experimental studies, and practical implementations across various engineering domains. We encourage submissions on a broad range of issues, including, but not limited to, the following:

- Intelligent sensing;
- Multisensor fusion;
- Predictive maintenance;
- Real-time fault detection;
- Adaptive control systems;
- Machine learning and artificial intelligence in fault diagnosis;
- Sensor-based monitoring systems.

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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