

Special Issue

Advances in Sensors for Online Condition Monitoring and Fault Diagnosis

Message from the Guest Editors

The increasing demand for reliability and efficiency in industrial systems has heightened the importance of online condition monitoring and fault diagnosis. Sensors play a pivotal role in capturing real-time data, enabling the detection and diagnosis of anomalies to prevent system failures and downtime. This Special Issue, “Advances in Sensors for Online Condition Monitoring and Fault Diagnosis”, aims to showcase state-of-the-art research and practical applications in this domain. We invite contributions that explore innovative sensor technologies, advanced data acquisition systems, and integration of artificial intelligence (AI) algorithms to enhance fault detection and diagnostic capabilities. Topics include, but are not limited to, the development of novel sensor materials and designs, AI-based data analytics techniques, edge computing for real-time monitoring, and case studies demonstrating the application of these technologies in industries such as manufacturing, energy, transportation, and construction.

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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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