# **Special Issue**

### Sensing Technologies for Fault Diagnostics and Prognosis

### Message from the Guest Editors

Machinery and mechanical structures in the industry suffer from inevitable degradation and performance degradation during operation. By collecting and processing data using a variety of sensors, timely diagnosis of symptoms of deterioration and reliable estimation of future health conditions are essential for industrial productivity and reliability. Models consisting of sensor data measured in the past using AI technology have shown great potential for fault diagnosis and prognosis in industrial equipment. Al-powered technologies will become more important in the future as the deployment of Internet of Things and cloudbased technologies for stateful maintenance makes vast amounts of measurement data available for decision making. This Special Issue will focus on fault diagnosis and prognosis of industrial equipment and mechanical structures using a variety of sensors. Sensor-based artificial neural network technology, explainable AI solutions, objects for error diagnosis and prognosis in the context of Industry 4.0, cloud computing, cyber-physical systems, and machine-tomachine interfaces and paradigms are welcome.

#### **Guest Editors**

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### Deadline for manuscript submissions

closed (20 January 2023)



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*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.

#### Editor-in-Chief

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