Special Issue

Intelligent Sensors for Structural Health Monitoring and Mechanical Fault Diagnosis

Message from the Guest Editors

Structural health monitoring (SHM) aims to identify the damage caused to fixed objects including aerospace, civil and mechanical engineering infrastructure, whereas mechanical fault diagnosis (MFD) seeks to monitor the health states and diagnose the damage to rotating objects including wind turbines, aero-engines and high-speed trains. However, it is vital for investigators to use advanced and intelligent sensors to acquire accurate and multi-source data from fixed and rotating objects. This Special Issue therefore aims to compile original research and review articles on the recent advances, technologies, solutions, applications, and new challenges in the field of intelligent sensors for SHM and MFD. These topics include, but are not limited to:

- Novel sensors and sensing technologies in SHM and MFD;
- Intelligent SHM and MFD methods;
- Improved and enhanced data quality methods in SHM and MFD;
- Advanced signal processing techniques in SHM and MFD;
- Sensor network design and optimization in SHM and MFD;
- Remaining useful life prediction in SHM and MFD;
- Built-in SHM and MFD intelligent maintaining and health management.

Guest Editors

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Deadline for manuscript submissions

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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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