Special Issue

Sensors for Predictive Maintenance of Machines: 2nd Edition

Message from the Guest Editor

Over the last few years, there have been some major breakthroughs in smart sensing technologies and in artificial intelligence (AI), including the emergence of pre-trained large AI models. The applications of these breakthrough technologies in machine predictive maintenance will have a very significant impact on the operation and maintenance of modern machinery. This Special Issue (SI) aims to provide a platform for researchers and developers to share their most current results in relation to machine condition monitoring, structural health monitoring, signal processing for fault detection and diagnosis, smart sensing and edge computing, and non-destructive testing (NDT). Potential topics include but are not limited to:

- AI-based machine predictive maintenance
- mechanical fault detection and diagnosis
- big data analytics for condition/health monitoring
- failure trending and prognosis
- structural health monitoring methods, technologies, and systems
- advanced signal processing for condition/health monitoring
- smart and novel sensors for condition/health monitoring
- sensor networks and data fusion for fault diagnosis, failure prognosis, and NDT

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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