Special Issue

Sensors for Predictive Maintenance of Machines

Message from the Guest Editor

This Special Issue (SI) is aimed at providing a platform for researchers and developers to share their most current results in machine condition monitoring, structural health monitoring, signal processing for fault detection and diagnosis, smart sensing and edge computing, and non-destructive testing (NDT). Topics of interest include the application of smart sensors and pre-trained large AI models to analyze vibration and acoustic data, text data, image data and voice data for machine predictive maintenance. Topics of interest include, but are not limited to:

- Al-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

Dr. Wenyi Wang

Defence Science and Technology Group (DSTG), Melbourne, VIC 3207, Australia

Deadline for manuscript submissions

closed (25 June 2025)



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/197125

Sensors Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sensors@mdpi.com

mdpi.com/journal/

sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



sensors



About the Journal

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.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)