

Special Issue

Intelligent Sensors for Structural Health Monitoring and Mechanical Fault Diagnosis: 2nd Edition

Message from the Guest Editors

This Special Issue 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 structural health monitoring (SHM) and mechanical fault diagnosis (MFD). These topics include, but are not limited to, the following:

- 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;
- Weak signal detection and enhancement in SHM and MFD;
- Built-in SHM and MFD intelligent maintenance and health management.

Guest Editors

Dr. Zijian Qiao

School of Mechanical Engineering and Mechanics, Ningbo University, Ningbo 315211, China

Dr. Zhihui Lai

College of Mechatronics and Control Engineering, Shenzhen University, Shenzhen 518060, China

Deadline for manuscript submissions

20 March 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/250633

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

[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



[mdpi.com/journal/
sensors](https://mdpi.com/journal/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)