

## 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

Faculty 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 October 2026



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/250633](https://mdpi.com/si/250633)

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

Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 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)