

## Special Issue

# Acoustic Sensing for Condition Monitoring

### Message from the Guest Editors

Acoustic sensing has emerged as a powerful tool for condition monitoring in various engineering fields, including mechanical health monitoring and structural health monitoring. Techniques such as ultrasonic sensing and acoustic emission enable real-time, non-invasive monitoring, making them valuable for detecting damage, wear, fatigue, and other faults. These methods are widely applied in industries such as civil infrastructure, aerospace, automotives, and manufacturing to enhance safety, reliability, and predictive maintenance. Recent advances in signal processing, sensor fusion, machine learning, and distributed sensing networks have significantly improved the reliability and efficiency of acoustic-based condition monitoring systems. This Special Issue aims to gather cutting-edge research on acoustic sensing technologies for condition monitoring, covering both methodological innovations and practical applications. We invite original contributions focusing on novel sensing techniques, real-world case studies, and advanced data analysis methods.

---

### Guest Editors

Dr. Pan Dou

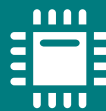
Prof. Dr. Tonghai Wu

Dr. Longbiao He

---

### Deadline for manuscript submissions

25 October 2025



## Sensors

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.5**  
**CiteScore 8.2**  
**Indexed in PubMed**



[mdpi.com/si/233237](https://mdpi.com/si/233237)

*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

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)