Special Issue

Advanced Sensors in Nondestructive Testing and Structural Health Monitoring

Message from the Guest Editor

The scope of this Special Issue encompasses various technologies used in advanced sensors, including but not limited to optical fibers, piezoelectric materials, wireless sensor networks, ultrasound, electromagnetic waves, and smart materials. We invite submissions that explore the design, development, simulation, and validation of advanced sensors. Additionally, we encourage researchers to share their work on practical applications of advanced sensors in SHM, including case studies that demonstrate their effectiveness in real-world scenarios. Both reviews and original research articles are welcome, contributing to the advancement of knowledge and implementation in this field. Authors are encouraged to address topics such as: Topics include, but are not limited to, the following:

- Design and simulation of advanced sensors;
- Case studies and practical applications showcasing the use of advanced sensors in SHM:
- Integration of advanced sensor technologies into existing NDT and SHM frameworks;
- Data analysis and interpretation methods for extracting valuable insights from sensor data;
- Proactive maintenance and repair strategies enabled by advanced sensor monitoring.

Guest Editor

Dr. Miguel A. Machado

Department of Mechanical and Industrial Engineering, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Lisbon, Portugal

Deadline for manuscript submissions

closed (25 April 2025)



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/175590

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



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)

