

## Special Issue

# Structural Health Monitoring Based on Piezoelectric Transducers

### Message from the Guest Editor

“Structural Health Monitoring, SHM” works are very multidisciplinary and aim, generally, to develop SMART materials and structures that directly convey information on their health state. The piezoelectric transducers, working in passive mode (acoustic emission sensors, capacitive measurement and charge measurements, ...) and active one (generators of ultrasonic waves and vibrations, acousto-ultrasonic and vibroacoustic testing,...), can be integrated into the core of material/structure or implanted on its surface in order to detect and monitor in real-time its damage mechanisms following thermal and/or mechanical stresses. In this context, this Special Issue entitled "Structural Health Monitoring Based on Piezoelectric Transducers" aims to make a point about the recent advances in the use of piezoelectric transducers and its copolymers (e.g., P(VDF/TrFE)); SMART layers; PFCs (piezoelectric fiber composites: AFCs/MFCs (active/macro fiber composites); PZT layers; Piezocomposite films; ASF (active structural fiber); SAW (surface acoustic wave);...) for the health state monitoring of polymer, composite, metallic, hybrid or property gradient materials and structures.

### Guest Editor

Dr. Walid Harizi

Université de Technologie de Compiègne, Roberval (Mechanics, Energy and Electricity), Centre de Recherche Royallieu, CS 60319, 60203 Compiègne CEDEX, France

### Deadline for manuscript submissions

closed (30 April 2023)



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/113014](https://mdpi.com/si/113014)

*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)