Special Issue

Structural Health Monitoring Using Sensors and Machine Learning

Message from the Guest Editors

The need to carry out structural health monitoring (SHM) for old structures is growing due to the rising demand for infrastructure and transportation structure facilities. This issue focuses on the application of the most recent sensing technology as well as machine learning to structural health monitoring. This issue aims to gather research relating to innovative SHM methods that utilise the newest sensing and machine learning technologies to generate efficient and consistent techniques. We welcome research in the field of sensor-based SHM and machine learning aiming to supplement or replace conventional manual inspections, including the latest experimental and theoretical studies, findings, and computational investigations. Topics of interest include:

- Structural health monitoring;
- Digital twins;
- Machine learning;
- Damage detection;
- Artificial intelligence;
- Guided wave testing;
- Acoustic emission;
- Vibration;
- Non-destructive testing;
- Signal processing;
- Real-time monitoring;
- Modal analysis/updating;
- Intelligent algorithms for data mining;
- Optimal sensor placement;
- Performance evaluation.

Guest Editors

Prof. Dr. Tat-Hean Gan
Brunel Innovation Centre, Brunel University London, Uxbridge, UK

Dr. Kamran Pedram
Electrical and Electronic Engineering, University of Greenwich, Greenwich ME4 4TB, UK

Deadline for manuscript submissions

closed (20 July 2024)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/133955

Sensors
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 3.4
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/sensors

MDPI

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 (Chemistry, Analytical) / CiteScore - Q1 (Instrumentation)