

Special Issue

Model-Free Structural Health Monitoring Approaches

Message from the Guest Editors

In a broad categorization, structural health monitoring (SHM) systems can be divided into model-based and model-free (data-driven) approaches. The model-based approach detects damages using a numerical model and physical description of the structure behavior. The model-free approach generally relies on the analysis of the structure behavior using data-driven algorithms and without developing a numerical model of the structure. The main advantage of the model-free approach of SHM is its great potential for network-based real-time SHM. This Special Issue will be focused on studies that present novel data-driven and model-free structural health monitoring systems for any type of structure or infrastructure. We welcome all studies that demonstrate the application of physical sensors and remote and smart sensing for developing a data-driven SHM system. Topics of interest include but are not limited to the following:

- structural health monitoring (SHM)
- data-driven
- model-free
- machine learning

Guest Editors

Dr. Donya Hajjalizadeh
Dr. Boulent Imam
Dr. Ying Wang

Deadline for manuscript submissions

closed (31 July 2023)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/79392

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)