







an Open Access Journal by MDPI

# Sensing and Data Elaboration in Structural Health Monitoring Technology

Guest Editors:

#### Dr. Monica Ciminello

Adaptive Structures Division, The Italian Aerospace Research Centre (CIRA), 81043 Capua, Italy

#### Dr. Ignazio Dimino

Adaptive Structures Tech Research Unit, CIRA, The Italian Aerospace Research Centre, 81043 Capua, CE, Italy

#### Dr. Antonio Concilio

Department of Adaptive Structures, Centro Italiano Ricerche Aerospaziali, 81043 Capua, CE, Italy

Deadline for manuscript submissions:

closed (20 May 2024)

## **Message from the Guest Editors**

Dear Colleagues,

Nowadays, sensing technology is increasingly being investigated for health monitoring purposes, ranging from aerospace to civil structures applications. A proper selection of sensors (from fibres to pzt or graphene-based, etc.) and an optimal definition of network layout can affect the observability of the target structures significantly, therefore impacting the monitoring process sensitivity, accuracy, and reliability of results.

Sensors can be bonded to or embedded within the reference system, providing data for real-time elaboration from manufacturing, assembly, verification tests, and operation. Suitable algorithms can make data processing smart by appropriate filtering and clustering.

This Special Issue aims to put together original research and review articles on SHM applications that address industrial requirements including new technologies, solutions, applications, and new challenges in the field of SHM systems.

# Keywords

- sensor technology;
- sensors integration;
- network layout optimization;
- qualification and certification;
- real-time data processing;





mdpi.com/si/158951









an Open Access Journal by MDPI

## **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

## **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.

### **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 & Instrumentation*) / CiteScore - Q1

(Instrumentation)

#### **Contact Us**