

## Special Issue

# Novel Approaches for Structural Health Monitoring II

### Message from the Guest Editor

The thirty-plus years of progress in the field of structural health monitoring (SHM) have left a paramount impact on our everyday lives. Be it for the monitoring of fixed- and rotary-wing aircrafts or for the predictive maintenance of long-span bridges or wind farms, SHM has shaped the framework of many engineering fields. However, old unsolved problematics as well as new challenges exist. Unmodeled nonlinearities, ineffective sensor placement, and the effects of confounding influences due to operational and environmental variability still harm the effectiveness of state-of-the-art SHM apparatuses. Unprecedented conditions such as stricter safety requirements, and ageing civil infrastructure pose new challenges for confrontation. Therefore, the aim of this Special Issue is to gather the main contributions of academics and practitioners in civil, aerospace, and mechanical engineering to provide a common ground for structural health monitoring. Studies concerning nondestructive testing, machine learning, signal processing, sensor fusion, vibration-based techniques, and related fields are all welcome, both numerical and experimental.

---

### Guest Editor

Dr. Cecilia Surace

BIO-Materials and Structures Laboratory (BIOMAST Lab), Department of Structural, Geotechnical and Building Engineering, Politecnico di Torino, 10129 Turin, Italy

---

### Deadline for manuscript submissions

closed (28 February 2023)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/74016](https://mdpi.com/si/74016)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appls@mdpi.com](mailto:appls@mdpi.com)

[mdpi.com/journal/](https://mdpi.com/journal/)

[appls](https://appls.mdpi.com)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, 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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )