



Smart Structures and Materials-Based Novel Sensing Technology for Civil Structures

Guest Editors:

Dr. Hongbing Chen

Research Institute of
Urbanization and Urban Safety,
School of Civil and Resource
Engineering, University of
Science and Technology Beijing,
Beijing 100083, China

Prof. Dr. Bin Xu

College of Civil Engineering,
Huaqiao University, Xiamen
361021, China

Deadline for manuscript
submissions:
closed (30 December 2022)

Message from the Guest Editors

To achieve effective non-destructive testing and structural health monitoring for civil structures, smart sensing approaches have been rapidly developed in recent years. However, damage and defects in largescale infrastructures are diverse and cannot be easily detected using conventional NDT techniques. Current inadequate and impressive sensing methods have obstructed the development of structural health monitoring. Advanced sensing approaches using smart structures and materials are urgently needed to meet the increasing requirements in practical engineering applications. The aim of this Special Issue is to generate discussion on the latest research advances in smart structures and materials-based novel sensing technology for civil structures. The Special Issue will publish full research articles and review papers. Potential topics include, but are not limited to, the following research areas:

- Smart materials and sensor design;
- Multifunctional materials for smart sensing;
- Detection mechanism analysis;
- Experimental study and numerical simulation;
- Non-destructive testing;
- Structural health monitoring.





sensors



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

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)