



sensors



an Open Access Journal by MDPI

Real-Time Monitoring Technology for Built Infrastructure Systems

Guest Editors:

Dr. Vikram Pakrashi

School of Mechanical and
Materials Engineering, University
College Dublin, 4 Dublin, Ireland

Dr. Ekin Ozer

School of Civil Engineering,
University College Dublin,
D04V1W8 Dublin, Ireland

Prof. Dr. Maria Q. Feng

Department of Civil Engineering
and Engineering Mechanics,
Columbia University, New York
City, NY 10027, USA

Deadline for manuscript
submissions:

15 December 2024

Message from the Guest Editors

Real-time detection of built infrastructure systems is rapidly gaining prominence for traditional (e.g., railways, bridges, pipelines) and emerging (e.g., wind turbines) infrastructure. While damage detection and structural health monitoring remain key questions, detection of other features of interest includes control, repair/rehabilitation, and other lifetime performance measures. This Special Issue addresses new methods, infrastructure demands, feature development, and related implementation around the question of ‘real-time’, in its widest interpretation. The topics include but are not limited to:

- Recursive methods for real-time detection;
- Model updating;
- Digital twinning;
- Sensor placement strategies;
- Sensor comparison;
- Monitoring design;
- Novel features of interest;
- Creation of robust detection of markers;
- Artificial Intelligence;
- Guidelines of reproducibility and accuracy;
- Quantification and qualification of uncertainty;
- Health-monitoring-informed decision support;
- Surrogate modeling applications;
- Advanced computer vision.



mdpi.com/si/123022

Special Issue



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](#)