

Special Issue

Intelligent Sensor Technologies for Predictive Maintenance and Structural Health Monitoring

Message from the Guest Editors

This Special Issue solicits research papers exploring the latest advances in intelligent sensor technologies for predictive maintenance and SHM of infrastructure. All submitted papers will undergo peer review before being published. Topics of interest include, but are not limited to, the following:

- Intelligent sensor networks for SHM;
- Wireless/online sensor networks for SHM data acquisition;
- Internet of Things (IoT) for SHM sensor data collection;
- Multi-sensor data fusion for SHM;
- Embedded sensors for SHM of structural materials;
- Energy-efficient sensor nodes for long-term SHM;
- Sensor technologies for concrete crack detection;
- Sensor technologies for structural condition assessment;
- Sensor technologies for predictive maintenance;
- Sensor data analytics for SHM and predictive maintenance;
- Structural model updating using sensor data;
- Deep learning for SHM sensor data analysis;
- Machine learning for predictive maintenance using sensor data

Guest Editors

Dr. Nizar Faisal Alkayem
Prof. Dr. Maosen Cao
Prof. Dr. Qiang Wang

Deadline for manuscript submissions

closed (29 May 2026)



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Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

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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

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