

## Special Issue

# Sensors and Sensing Technologies for Structural Health Monitoring in Civil, Mechanical, and Aerospace Engineering

### Message from the Guest Editors

Structural Health Monitoring (SHM) has emerged as a key enabler for ensuring the safety, reliability, and sustainability of engineered systems in civil, mechanical, and aerospace applications. Advances in sensor technologies and data-driven methods now allow for early detection of damage, monitoring of degradation processes, and real-time assessment of structural integrity under complex service conditions.

This Special Issue of *Sensors* will gather cutting-edge research on sensors, sensing principles, and integrated monitoring strategies for SHM across different engineering domains. Contributions are welcomed on topics including novel sensor design, multifunctional and self-powered sensors, wireless and distributed sensing networks, and advanced interrogation methods. Potential topics include but are not limited to:

- structural health monitoring (shm)
- civil, mechanical, and aerospace structures
- sensor technologies and networks
- non-destructive evaluation (nde)
- wireless and distributed sensing
- data-driven methods and machine learning
- digital twins and predictive maintenance
- smart and multifunctional materials

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### Guest Editors

Dr. Francesco Nicassio  
Prof. Dr. Gennaro Scarselli  
Dr. Anastasios C. Mpalaskas

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### Deadline for manuscript submissions

31 October 2026



## Sensors

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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.

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### Editor-in-Chief

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