

# Special Issue

## New Technologies in Non-destructive Testing and Structural Health Monitoring

### Message from the Guest Editors

The purpose of this Special Issue is to provide an interdisciplinary forum for discussion on structural health monitoring (SHM); nondestructive testing/evaluation strategies associated with smart structures;

civil/mechanical/aerospace/materials/construction engineering; material science; and computer science.....As such, this Special Issue will cover the analysis of various types of materials (e.g., composite, metallic, concrete, amongst others) and through manual, semi-automatic, and automated techniques. Topics of interest include, but are not limited to, the following:

- SHM and NDT methods for the assessment of valuable assets;
- New signal processing and filtering methods;
- Artificial intelligence, machine learning, and data mining;
- Damage modeling and fracture simulation;
- Ultrasonic signals and their applications;
- Uncertainty quantification and management;
- Acoustic emission, guided waves, and electromechanical impedance.
- Vibration-based SHM;
- Damage identification;
- Sensors and actuators.

For further reading, please follow the link to the Special Issue Website at:

[https://www.mdpi.com/journal/buildings/special\\_issues/HK62228CUW](https://www.mdpi.com/journal/buildings/special_issues/HK62228CUW)

### Guest Editors

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### Deadline for manuscript submissions

closed (31 December 2022)



## Buildings

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## About the Journal

### Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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### Editor-in-Chief

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### Author Benefits

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indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Construction and Building Technology) /  
CiteScore - Q1 (Architecture)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).