

# Special Issue

## Structural Health Monitoring and Damage Detection in Civil Engineering

### Message from the Guest Editors

The evaluation of the structural behaviour of existing constructions represents one of the most actual structural engineering research topics. The use of structural health monitoring techniques is fundamental for the evaluation of the correct structural behaviour of existing constructions. This Special Issue aims to include articles and review papers addressing structural health monitoring techniques and damage detection, focusing on existing constructions. We welcome manuscripts from the following fields:

- The application of new monitoring systems for damage detection;
- The design of innovative monitoring systems;
- The structural health monitoring of non-standard structures (steel wind turbines, chimneys, high-rise buildings, etc.);
- The evaluation of the static and dynamic behaviour of existing structures;
- The evaluation of maintenance interventions on existing bridges;
- The design of retrofitting interventions;
- The analysis of the structural behaviour of historic constructions.

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

[https://www.mdpi.com/journal/buildings/special\\_issues/KBYMPX0X9Y](https://www.mdpi.com/journal/buildings/special_issues/KBYMPX0X9Y)

### Guest Editors

Dr. Marco Zucca

Dr. Enrica Vecchi

Dr. Pietro Giuseppe Crespi

Dr. Manuela Alessandra Scamardo

### Deadline for manuscript submissions

30 November 2025



## Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 4.4

---



[mdpi.com/si/223167](https://www.mdpi.com/si/223167)

*Buildings*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[buildings@mdpi.com](mailto:buildings@mdpi.com)

[mdpi.com/journal/  
buildings](https://www.mdpi.com/journal/buildings)





# Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 4.4



[mdpi.com/journal/  
buildings](https://mdpi.com/journal/buildings)



## 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.

---

### Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and Management Program, Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

---

### Author Benefits

#### High Visibility:

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).