

# Special Issue

## New Technologies and Materials in Structural Health Monitoring of Civil Infrastructures

### Message from the Guest Editors

Civil infrastructures play a crucial role in modern society by providing essential services and supporting economic growth. Civil infrastructures deteriorate and become damaged due to various reasons including aging, weathering, poor maintenance, prolonged overloadings, vibrations, foundation settlements, and disasters (such as floods, fire, and earthquakes). Structural health monitoring (SHM) is one of the most reliable methods for condition and performance monitoring of civil infrastructures. SHM ensures safe operation, improves operational efficiency, reduces the life-cycle costs, and increases the sustainability of infrastructures. Given the importance of civil infrastructures, this Special Issue aims to promote the latest advancements in the field of SHM and smart materials for infrastructures to improve the infrastructures' safety, sustainability, and performance.

### Guest Editors

Dr. Ahad Javanmardi

Dr. Fuyun Huang

Dr. Khaled Ghaedi

Dr. Alessandro Contento

Prof. Dr. Hamed Benisi Ghadim

### Deadline for manuscript submissions

closed (20 June 2024)



## Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 4.4



[mdpi.com/si/172598](https://mdpi.com/si/172598)

*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://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).