Special Issue

Advances in Testing and Computation Methods for Disaster Mitigation of Engineering Structures

Message from the Guest Editors

The safety of engineering structures against natural hazards is a subject of great interest to researchers and is important for protecting human life and reducing economic losses. This Special Issue is dedicated but not limited to current research on experimental, theoretical, computational, including the following:

- analyzing and simulating natural hazards;
- damage assessment of engineering structures under natural hazards;
- modeling and applications of new construction materials for structural engineering;
- design methodologies of newly developed structural components and systems;
- advanced testing and modeling technologies;
- maintenance, repair and retrofit of existing structures;
- vulnerability, risk and reliability assessment of engineering structures under earthquakes, winds, fires, and tsunami;
- advanced methods for the evaluation and design of resistance and resilience of structural systems.

For more information, please click on the following link: https://www.mdpi.com/journal/buildings/special_issues /CO9FF76RZI

Guest Editors

Dr. Ligiang Jiang

Dr. Fengqi Guo

Dr. Linli Duan

Dr. Yi Hu

Deadline for manuscript submissions

closed (30 June 2025)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/199115

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

mdpi.com/journal/buildings





an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4





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).