

Special Issue

Research in Structural Engineering and Mechanics

Message from the Guest Editor

Structural engineering mainly includes ground buildings, underground structures, and special structures; it uses mechanical methods to analyze and design structures and to evaluate the service status.

This special issue aims to present and communicate the latest research results at the intersection of structural mechanics, computational methods, and experiments. These papers focus on the innovative applications of steel-concrete composite design, high-performance materials, structural health monitoring, resilience under extreme loads, and computational modeling techniques to advance the design, construction, and maintenance of sustainable and resilient steel/concrete structures and guide the development of advanced codes and standards for infrastructure. Topics relevant to this Special Issue include:

- Structural safety and reliability
- New material development and application
- Advanced analysis methods for structures engineering
- New methods for the design of structures
- Construction and maintenance
- Computational modeling techniques and simulations
- Structural health monitoring and damage detection
- Life cycle analysis and sustainability

Guest Editor

Prof. Dr. Jiamei Zhou

State Key Laboratory of Intelligent Geotechnics and Tunnelling,
Southwest Jiaotong University, Chengdu 610031, China

Deadline for manuscript submissions

closed (30 December 2024)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/209347

Buildings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).