

Special Issue

Structural Performance and Hazard Mitigation of Large-Scale Frame Structures

Message from the Guest Editors

Frame structures, made of steel, reinforced concrete, or a combination of both, are widely utilized in modern building construction. In recent decades, the structural performance and design methods of large-scale frame structures under natural or man-made hazards have drawn widespread attention in the civil engineering community because of the possibility of collapse. These hazards include earthquakes, hurricanes, tornadoes, floods, tsunamis, blasts, fire, etc. To increase structural resilience and reduce collapsing potential for frame structures, new knowledge, tools, and standards are required to improve structural performance to withstand these hazards. This Special Issue welcomes new submissions of original research and reviews on risk evaluation, risk reduction, structural resilience, or the structural robustness of large-scale frame structures, including but not limited to: Building-level structural performance assessment; Performance criteria development of structural systems; Risk evaluation and mitigation of structural systems; Structural robustness and structural resilience of structural systems; Structural performance of composite structures.

Guest Editors

Dr. Junjie Wang

Prof. Dr. Hetao Hou

Dr. Zeyu Zhou

Dr. Dongchen Ye

Qun He

Deadline for manuscript submissions

closed (31 December 2023)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 5.6



mdpi.com/si/175259

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 5.6



[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 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).