Special Issue

High-Rise Building Design: Phenomena and Analyses Involved

Message from the Guest Editors

High-rise building design is a topic of research dedicated to ensuring the safety, sustainability and comfort of the constructed environment. Computational and experimental techniques are used for assessing the integrity of buildings over time. In this Special Issue, papers dedicated to experimental and/or numerical studies on phenomena and analyses involved in the design of high-rise buildings are welcome. Applications focusing on buildings with lateral displacements are particularly relevant in the analyses. The safety and comfort of building occupants and pedestrians in surrounding areas are also relevant in this context. Original research, case studies and state-of-the-art reviews are welcomed. Papers published in this Special Issue should describe original works in different topics in both science and engineering, such as mechanics of structures, fire engineering, fluid–structure interaction, dynamics of structures and nonlinear analysis. This Special Issue will be of interest to researchers working with service states, structural analysis of buildings, architecture, urban engineering, wind engineering, safety engineering, historical construction assessment.

Guest Editors

Dr. Marcelo Greco
Departamento de Engenharia de Estruturas, Universidade Federal de Minas Gerais, Belo Horizonte 31270-901, Minas Gerais, Brazil

Dr. João Paulo Correia Rodrigues
Department of the Civil Engineering, University of Coimbra, 3000-370 Coimbra, Portugal

Deadline for manuscript submissions

30 September 2025

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/216949

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

mdpi.com/journal/buildings

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

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).