Special Issue

Computational Models for Dynamic Analyses of Buildings and Structures

Message from the Guest Editors

The analysis of the dynamic behavior of buildings and structures has had notable development in recent decades thanks to the ever-increasing effectiveness of modeling and calculation tools. The availability of a reliable computational model, either accurate or simplified, is, without doubt, one of the most crucial needs for a structural engineer. One of the most studied problems in structural engineering concerns the estimation of the seismic vulnerability of existing buildings, many of which were built in the absence of specific technical regulations. The reliability of this estimate is closely linked to the correct modeling of the building in question concerning both structural and nonstructural elements. Another fundamental aspect in structural engineering concerns[...] For further reading, please follow the link to the Special Issue Website at: https://www.mdpi.com/journal/buildings/special_issues /Computational_Models_Analyses_Buildings

Guest Editors

Dr. Annalisa Greco

Prof. Dr. Salvatore Caddemi

Prof. Dr. Ivo Caliò

Deadline for manuscript submissions

closed (31 December 2021)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/76516

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).