

Special Issue

Advances in Modal Testing, Nondestructive Testing and Structural Health Monitoring

Message from the Guest Editors

This Special Issue aims to summarize the recent advances in modal testing, nondestructive testing and structural health monitoring (SHM), considering the various approaches that have been evolved and put forward for application in mechanical and aerospace engineering. New simulation approaches have also experienced extensive studies for their use in structural dynamic analysis, such as algorithm-based structural optimization. This Special Issue also welcomes investigations into algorithm development, deep learning, signal processing, data management and so on. High-quality investigations regarding modal testing and nondestructive testing based on the applications of mechanical and aerospace engineering are encouraged, as are reviews summarizing their advances over recent years.

Guest Editors

Prof. Dr. Yunlai Zhou

School of Aerospace Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Prof. Dr. Xiaochuan Liu

Aircraft Strength Research Institute of China, Xi'an, China

Prof. Dr. Qian Zhang

Department of Mechanics, School of Mechanical Engineering, Tianjin University, Tianjin, China

Deadline for manuscript submissions

closed (30 June 2023)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 5.6



mdpi.com/si/154040

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).