

Special Issue

Smart Structural and Material Solutions for Buildings Using Composite Materials

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue entitled “Smart structural and material solutions for buildings using composite materials”. In recent decades, rapid development in the field of construction materials (e.g., concrete, steel, FRP, wood, etc.) has contributed to generating high-performance, cost-effective composite materials that possess superior durability and mechanical performance required for multiple applications. This Special Issue aims at collecting original research papers and reviews on the latest advances in composite materials, including but not limited to:

- Steel-concrete composites;
- FRP composites;
- Wood-concrete composites;
- Prestressed composites;
- Polymeric composites;
- Deconstructable composites;
- Lightweight composites;
- Fibrous composites;
- Innovative structural approaches;
- Structural optimization;
- New design methodologies and data-driven predictions models; etc..

Guest Editors

Dr. Mohamed K. Ismail

Dr. Ahmed Elshaer

Dr. Basem H. Abdelaleem

Dr. Ahmed Youssri Elruby

Deadline for manuscript submissions

closed (10 January 2024)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/135625

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 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).