Special Issue

High-Performance Sustainable Construction Materials and Building Structures

Message from the Guest Editors

In an era of growing environmental awareness and rapid technological advancement, this special issue aims to explore the intersection of cutting-edge materials and sustainable structures, offering a platform for researchers and experts to share their innovative findings. This special issue invites contributions that delve into a wide spectrum of topics, from novel materials with enhanced mechanical properties to sustainable design methodologies and construction techniques. We welcome research that addresses both the theoretical aspects and practical applications in the fields of architecture, civil engineering and material science. Our mission is to bridge the gap between high performance and sustainability, fostering discussions and discoveries that promise to revolutionise the way we build and develop our environment. Whether your focus is on eco-friendly building materials, resilient infrastructure or breakthroughs in structural engineering, we encourage you to submit your work and be a part of this exciting initiative.

Guest Editors

Prof. Dr. Yao Sun

Prof. Dr. Davor Skejic

Dr. Samar Raffoul

Dr. Engui Liu

Deadline for manuscript submissions

closed (31 January 2025)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/189809

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).