Special Issue

Research on Sustainable and High-Performance Cement-Based Materials

Message from the Guest Editors

As buildings age and urban infrastructure expands, the need for high-performance materials and effective repair strategies becomes increasingly critical. Innovation in materials and construction techniques is essential for extending building lifespans, improving sustainability, and enhancing energy efficiency.

This Special Issue of *Buildings* focuses on cutting-edge research and practical insights into the design, application, and performance of traditional and advanced materials for structural rehabilitation and renewal. We invite original research articles, case studies, and review papers that address material durability, repair technologies, renovation methods, sustainability, and digital tools for assessment and maintenance.

Topics of interest include novel construction materials, eco-friendly repair techniques, structural health monitoring, and smart solutions for long-term performance. We look forward to your contributions to help create a more resilient and sustainable built environment. Dr. Yanlinag Ji Dr. Ting Zhang

Guest Editors

Dr. Yanliang Ji

Dr. Alexander Mezhov

Dr. Ting Zhang

Deadline for manuscript submissions

30 November 2025

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/239387

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).