Special Issue

The Integration of Building Information Modeling (BIM) Technology and Artificial Intelligence (AI) in Smart Buildings

Message from the Guest Editors

This Special Issue delves into the innovative applications of building information modeling (BIM) technology within smart buildings, exploring its synergistic integration with digital twins and cutting-edge artificial intelligence algorithms. We aim to provide in-depth analysis of how these technologies intersect with crucial domain, such as knowledge management, information exchange, human behavior simulation, and advanced digital design methods. As a groundbreaking integrated methodology, BIM offers a holistic digital portrayal of architectural environments, revolutionizing the efficiency and precision of architectural design, construction, and operational management. These BIM models are capable of simulating and analyzing the real-time performance of buildings, thus offering invaluable insights. The integration of artificial intelligence further elevates this process, streamlining the handling of building data and decision making. This not only boosts managerial efficiency, but also significantly enhances the overall user experience. For more information please click on the link below:
https://www.mdpi.com/journal/buildings/special_issues/P5378T74AP

Guest Editors

Dr. Guoqian Ren

Dr. Yang Zou

Dr. Xiaoran Huang

Deadline for manuscript submissions

closed (30 June 2024)

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/192666

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

MDPI

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).