Special Issue

Advance in BIM-Based Technologies for Sustainable Building Performance Predictions

Message from the Guest Editors

The primary objective of this Special Issue is to publish original theoretical, methodological, and empirical research papers focusing on techniques to support building performance predictions. Specific topics include, but are not limited to, sustainable construction methods and technologies, digital twins in the construction industry, artificial intelligence in scheduling, and simulation-based methods for construction scheduling and virtual construction.

- building design
- construction processes
- construction management
- building information modeling (BIM)
- off-site construction
- modular construction
- design for manufacturing and assembly (DFMA)
- sustainable construction methods and technologies
- digital twins in the construction industry
- artificial intelligence in scheduling
- simulation-based methods for construction scheduling and virtual construction

Guest Editors

Dr. Woon Seong Jeong

Department of Architectural Engineering, Chungbuk National University, Cheongju 28644, Republic of Korea

Prof. Dr. Sang-Guk Yum

Department of Civil Engineering, Gangneung-Wonju National University, Gangneung 25457, Republic of Korea

Deadline for manuscript submissions

10 August 2025

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/191351

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).