

## Special Issue

# Human-Machine Collaboration in Industrialized Construction: Theories, Approaches, Key Technologies, and Applications

### Message from the Guest Editors

Submissions for this Special Issue can include, but are not limited to, the following topics:

- Hybrid intelligence, Human-robot collaboration and Knowledge-based systems in industrialized construction;
- Effective information and knowledge management;
- Expert systems for decision making;
- Hybrid collaborative working systems;
- Behavior patterns and trust model of human-machine collaboration;
- Smart project delivery of industrialized construction;
- Sustainability and decarbonization of human-machine collaboration;
- Intelligent planning, scheduling, quality assurance, safety monitoring;
- Blockchain-based collaboration;
- Digital twin, BIM, and IoT for industrialized construction;
- Deep learning, federated learning, and natural language processing in construction.

For further reading, please follow the link to the Special Issue Website at:

[https://www.mdpi.com/journal/buildings/special\\_issues/Industrialized\\_Construction](https://www.mdpi.com/journal/buildings/special_issues/Industrialized_Construction)

### Guest Editors

Dr. Xiao Li

Dr. Yue Teng

Dr. Chengke Wu

Dr. Hengqin Wu

Prof. Dr. Geoffrey Qiping Shen

### Deadline for manuscript submissions

closed (20 November 2022)



## Buildings

an Open Access Journal  
by MDPI

Impact Factor 3.1  
CiteScore 4.4



[mdpi.com/si/102175](https://www.mdpi.com/si/102175)

*Buildings*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[buildings@mdpi.com](mailto:buildings@mdpi.com)

[mdpi.com/journal/  
buildings](https://www.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 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).