

# Special Issue

## Innovations and Complexities in Building Envelope Design

### Message from the Guest Editors

This Special Issue examines the theoretical and methodological approaches to the executive design of advanced integrated building envelope systems, according to the application of, smart manufacturing and design for assembly and manufacturing (DfMA) processes. The cross-cutting and multidisciplinary research presented in this Special Issue will original and innovative experimental methods for the environmental, energy, and technical evaluation of advanced integrated building envelope systems (compared to traditional façade solutions), through the analysis of:

- The economy and time efficiency of incremental integration procedures;
- The efficiency of physical processes of energy and/or air exchange (between indoor and outdoor environments), through the use of (passive) devices defined by renewable energy sources;
- The analytical observation and simulation of the energy performance of buildings.

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

at: [https://www.mdpi.com/journal/buildings/special\\_issues/5A82XAO743](https://www.mdpi.com/journal/buildings/special_issues/5A82XAO743)

---

### Guest Editors

Prof. Dr. Ingrid Paoletti

Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano, 20133 Milan, Italy

Dr. Massimiliano Nastri

Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano, 20133 Milan, Italy

---

### Deadline for manuscript submissions

31 October 2025



## Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 4.4



[mdpi.com/si/235177](https://www.mdpi.com/si/235177)

*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).