

# Special Issue

## Resilient Urban and Architecture Design: Strategies for Low-Carbon and Climate-Adaptive Cities

### Message from the Guest Editors

With rapid urbanization and climate change, cities must balance growth with sustainability. This Special Issue explores innovative design strategies that promote resilience and adaptability in urban environments and architecture, focusing on low-carbon and climate-adaptive solutions.

This Special Issue begins by examining the principles of resilient urban design, emphasizing integrating natural systems with built environments to create cities capable of withstanding and recovering from climate-related disruptions. It delves into the role of green infrastructure, in enhancing urban biodiversity, reducing heat island effects, and improving air quality. Next, this issue explores low-carbon design practices in architecture, including passive design strategies that utilize natural light, ventilation, and thermal mass to reduce energy consumption, the use of low-carbon sustainable building materials, and the integration of renewable energy systems into urban buildings. By fostering resilience and adaptability it contributes to the creation of cities that mitigate the impacts of climate change and thrive in the face of future uncertainties.

---

### Guest Editors

Dr. Xuan Ma

School of Architecture, Chang'an University, Xi'an 710061, China

Dr. Juan Ren

School of Architecture, Chang'an University, Xi'an 710061, China

---

### Deadline for manuscript submissions

closed (30 June 2025)



## Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 4.4



[mdpi.com/si/209853](https://mdpi.com/si/209853)

*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://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).