

## Special Issue

# A New Framework for Building Light Environments: Multi-Dimensional Perception, Intelligent Response, and a Sustainable Future

### Message from the Guest Editors

The architectural light environment is being redefined as a dynamic system that interacts with occupants, impacting their health, well-being, and cognitive performance. This shift drives multidimensional research into lighting as visual information, a biological regulator, and an emotional influence.

This Special Issue seeks research advancing healthy, sustainable lighting. Contributions should address core challenges—from visual and non-visual mechanisms to human-centric intelligent control—emphasizing integrated daylighting and electric lighting. Studies must support visual comfort, occupant health, and net-zero-energy goals, while tackling real-world issues like urban glare.

We welcome original research, reviews, and experimental work across the spectrum, including:

- Intelligent lighting/daylighting control and behavior;
- Visual and non-visual effects;
- Adaptive daylighting systems;
- Urban daylight planning and comfort;
- Novel evaluation methods and metrics;
- Energy and performance modeling;
- Glare perception and mitigation.

### Guest Editors

Dr. Ying He

Faculty of Architecture and Urban Planning, Chongqing University,  
No.174 Shazhengjie, Shapingba, Chongqing 400044, China

Dr. Xianyun Cai

School of Architecture and Urban Planning, Chongqing Jiaotong  
University, No. 66 Xuefu Avenue, Nan'an District, Chongqing 400074,  
China

### Deadline for manuscript submissions

31 July 2026



## Buildings

an Open Access Journal  
by MDPI

Impact Factor 3.1  
CiteScore 4.4



[mdpi.com/si/265165](https://mdpi.com/si/265165)

*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).