

Special Issue

Advances in Urban Heat Island and Outdoor Thermal Comfort

Message from the Guest Editors

The accelerating pace of global urbanization, while driving economic growth, has also brought about severe environmental challenges, with the urban heat island effect being particularly pronounced. The persistent rise in urban temperatures not only exacerbates energy consumption and air pollution but also directly threatens public health by diminishing outdoor thermal comfort. This Special Issue focuses on research within the field of multiscale urban thermal climates, aiming to explore effective strategies for mitigating the urban heat island effect, enhancing outdoor thermal comfort, and shaping liveable, healthy, and sustainable urban environments. We welcome submissions of high-quality original research papers and review articles showcasing cutting-edge research and innovative practices in the domains of urban heat islands and outdoor thermal comfort.

Guest Editors

Dr. Hongchi Zhang

Dr. Huimin Liu

Dr. Yihan Wu

Dr. Jun Zhao

Deadline for manuscript submissions

31 May 2026



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/256245

Buildings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).