

Special Issue

Building Design: Robust and Human Centered

Message from the Guest Editors

Over the past few decades, building design has gone through significant changes in order to increase energy efficiency—architectural changes, as well as changes in building technology. Both the complexity and capital costs have increased, while it seems that user satisfaction has decreased. In addition, it has been recognized that the desired level of energy performance is not often achieved. This effect is called the “performance gap” and has been the subject of several scientific studies and journal papers. The performance gap is primarily caused by building systems (mainly building control systems and hydronics for energy supply systems) and/or user behavior. Building design goes through an optimization process; however, we recognize that the final product is not yet robust. The interface between users and building systems is complex and not fully understood yet. The variations in user behavior are not properly considered in building design.

Guest Editors

Prof. Thomas Auer

Department of Architecture, Technische Universität München (TUM), München, Germany

Prof. Dr. Ulrich Knaack

TU Delft, Delft, The Netherlands;
TU Darmstadt, Germany

Deadline for manuscript submissions

closed (30 June 2019)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/18185

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).