Special Issue

Digital and Intelligent Approaches for Sustainable Architectural Design

Message from the Guest Editors

Emphasizing the intelligence and sustainability of architectural design is an important design concept with practical value. Technological innovation has been driving the development of the construction industry for decades. At present, the application of these digital and intelligent approaches in architectural design can greatly improve the quality and efficiency of architectural design, and ensure that the architectural design results can fully meet the actual needs of users. This Special Issue aims to introduce the latest research findings and ideas on the topic of digital and intelligent approaches for sustainable architectural design to global readers. The Special Issue covers original research and review studies, including but not limited to:

- Sustainable architecture design;
- Digital and immersive technologies for architectural design;
- Digital architecture and intelligent construction:
- Intelligent, healthy and sustainable built environments;
- Optimization of multi-objective architectural design decision:
- Emerging technologies applied to architectural design;
- Decision models for sustainable built environments;
- Architectural geometry construction.

Guest Editors

Prof. Dr. Yi-Kai Juan

Department of Architecture, National Taiwan University of Science and Technology, Taipei City 106, Taiwan

Dr. Tsung-Hsien Wang

School of Architecture and Landscape, University of Sheffield Arts Tower, Western Bank, Sheffield S10 2TN, UK

Deadline for manuscript submissions

closed (10 March 2024)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/127551

Buildings Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 buildings@mdpi.com

mdpi.com/journal/buildings





an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4





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).