buildings

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

CITESCORE 3.4

Architectural Design Based on the Influence of Indoor and Outdoor Environments

Guest Editors:

Prof. Dr. Jose-Manuel Almodovar-Melendo
School of Architecture, University of Seville, 41004 Seville, Spain

Prof. Dr. Jose Cabeza-Lainez
Department of Architectural Composition, Universidad de Sevilla, 41004 Sevilla, Spain

Prof. Dr. Pablo La Roche
1. Department of Architecture, Cal Poly Pomona University, Pomona, CA 91768, USA
2. CallisonRTKL, Los Angeles, CA, USA

Deadline for manuscript submissions:
closed (30 April 2024)

Message from the Guest Editors

More than 40% of world energy consumption, and one-third of global carbon emissions, are produced in the construction sector. Furthermore, it is estimated that energy consumption in buildings can increase around 50% by 2050 due to the rapid growth in population and energy demand in emerging countries. Taking into account that the architectural design has a decisive impact on the energy demand of buildings during all their lifetime, this Special Issue is focused on cutting-edge research and technologies addressing climate-responsive design, based on the interaction between the indoor and outdoor environments. The main goal is to reduce the energy demand and carbon emissions in buildings, as well as increase the environmental comfort of the users. All types of integrated perspectives and research, both experimental and theoretical, addressing the problem of designing with climate are welcome: case studies, effective design guidelines, new design approaches, scientific analysis of historical precedents, retrofitting of existing buildings, solar design, and innovative passive systems.

buildings

IMPACT FACTOR 3.1

CITESCORE 3.4

an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.
Journal Rank: JCR - Q2 (*Engineering, Civil*) / CiteScore - Q1 (Architecture)

Contact Us

Buildings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/buildings
buildings@mdpi.com
𝕏@Buildings_MDPI