buildings

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

CITESCORE 3.4

Heating and Cooling of Buildings

Guest Editor:

Dr. Kui Shan
Department of Building Environment and Energy Engineering, Research Institute for Smart Energy, The Hong Kong Polytechnic University, Hong Kong, China

Deadline for manuscript submissions:
closed (31 October 2022)

Message from the Guest Editor

Dear Colleagues,

According to an International Energy Agency (EIA) report, buildings contribute to 28% of global energy-related carbon emissions. Building space cooling demand has increased more than 38% in the past 10 years, while space heating accounts for one-third of the total global energy demand in buildings. To achieve the challenging task of carbon neutrality by 2050, building heating and cooling systems must play their roles.

Many efforts have been devoted to the development of technologies for energy-efficiency enhancement of building heating and cooling systems. Those technologies include building load prediction, optimal design, optimal control, fault detection and diagnosis, building thermal storage, integration with renewables, combined cooling, heat & power (CCHP), district heating/cooling, etc.

For more information, please view the following link:

https://www.mdpi.com/journal/buildings/special_issues/HCB

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, St. Alban-Anlage 66
4052 Basel, Switzerland

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

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