Special Issue

Building Energy Efficiency Assessment and Retrofit Technologies

Message from the Guest Editors

Buildings account for a substantial share of energy consumption and associated greenhouse gas emissions, placing them at the center of today's energy and environmental challenges. As existing building stocks continue to age, the need for effective assessment methods and innovative retrofit technologies has become more critical than ever. Enhancing building energy efficiency is key not only to reducing environmental impacts but also to improving occupant comfort, resilience, and long-term economic performance. This Special Issue, titled "Building Energy" Efficiency Assessment and Retrofit Technologies", will bring together the latest advances in assessment methodologies, performance evaluation, retrofit solutions, and implementation strategies that enable the transformation of existing buildings into more sustainable, energy-efficient, and low-carbon assets. We invite researchers and practitioners to contribute original research articles, case studies, and reviews that advance knowledge and practice in this critical field.

Guest Editors

Dr. Linyan Chen

Prof. Dr. Joseph H. K. Lai

Dr. Fan Zhang

Deadline for manuscript submissions

30 September 2026



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/255043

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).