

Special Issue

Innovative Approaches to Achieving Building Energy Efficiency

Message from the Guest Editor

Due to the rapid increase in living standards, together with climate change, energy use in buildings will continuously increase in the coming years. Improving energy efficiency in buildings is, therefore, essential to reduce global energy usage and promote the sustainability of our built environments, as a large proportion of the total energy used worldwide is from buildings. This Special Issue invites researchers to contribute original research articles and review articles on innovative approaches and solutions to achieve energy efficient buildings and energy efficient building heating, ventilation and air-conditioning (HVAC) systems to assist in significantly reducing energy use and carbon footprint from the built environment. Potential topics include, but are not limited to:

- Thermal and electrical energy storage
- Intelligent buildings and building control optimization
- Energy efficient building design
- Building refurbishment and resilience
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Guest Editor

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Deadline for manuscript submissions

closed (30 April 2018)



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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

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).