Special Issue

Thermal Comfort and Energy Efficiency in Built Environments

Message from the Guest Editors

The appropriate design of built environments plays a key role in improving human comfort, health, and productivity, while also reducing building energy consumption. However, applying a one-size-fits-all model is challenging due to diverse living contexts and individual differences. Emerging methodologies and concepts, such as personal comfort systems, big data, machine learning, and smart building technologies are revitalizing the field of built environment, offering new possibilities to enhance human well-being and promote energy efficiency. This Special Issue invites research contributions on topics including but not limited to the following:

- Indoor environmental quality;
- Human responses;
- Thermal comfort models;
- Personal comfort systems:
- Smart building technologies;
- Energy efficiency.

Guest Editors

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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

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