

Special Issue

Strategies for Green Building, Ventilation Efficiency and Fire Protection

Message from the Guest Editors

With the the building construction industry heading in low-carbon, green, safe and intelligent directions, how to exactly to ensure thermal comfort while reducing energy consumption and carbon emissions in the building environment has attracted people's attention. It is therefore worth exploring ways to improve people's understanding of the relationship between energy conservation and carbon reduction in buildings and human comfort, safety and health. The main aim of this Special Issue is to explore the recent challenges and developments of strategies for green building, ventilation efficiency and fire protection. Topics include, but are not limited to, the following: Balance between thermal comfort and energy conservation or carbon emission; Impact of building ventilation on the performance of low-carbon buildings; Carbon emission reduction strategy in building operation stage; Ventilation system and smoke control in aboveground green buildings; Ventilation and smoke control in underground space buildings; Machine learning on thermal comfort prediction for building; CFD and BIM technologies for building ventilation system.

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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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