



Indoor Air Quality and Thermal Comfort Enhancement in Large-Scale Indoor Spaces: Monitoring, Modeling, Controls

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Message from the Guest Editors

Large-scale public indoor spaces have unique features of airflow inside the space being dominated by supply air diffusers, partially or randomly distributed occupants, and heat transfer through building enclosures. This results in inhomogeneous indoor parameter distributions in terms of temperature, air speed, pollutants and so on, both in the horizontal and vertical direction. However, traditional ventilation control strategies are incapable of dealing with this problem properly. At the cost of massive energy use, they attempt to maintain overall indoor thermal comfort. Thus, developing sophisticated and practical technologies to precisely improve the indoor environment is imperative, especially during the COVID-19 era. It is currently complicated and labor-intensive to enhance such an indoor environment by certain regular technical means. Thus, this Special Issue focus on indoor environment improvement tactics for large-scale indoor spaces. In particular, it aims to reduce energy consumption and contaminant transport. Practical and innovative techniques and interdisciplinary research related to monitoring, modelling and controlling indoor spaces are welcome.





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Message from the Editor-in-Chief

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