Special Issue

Advanced Research on the Urban Heat Island Effect and Climate

Message from the Guest Editors

Mitigating urban heat islands helps to effectively address global climate change and promotes sustainable urban development. Given the comprehensive nature of the urban heat island effect, exploratory research based on the integration of multidisciplinary theories and technical methods is a crucial approach for understanding its intensity variations and formation mechanisms, as well as for exploring its impacts on public health and socio-economic factors. The research topics in this area include, but are not limited to, the following:

- Urban Heat Island in the Context of Global Climate Change;
- Urban Heat Island and New Urbanization;
- Urban Heat Island and Eco-City Development;
- Urban Heat Island and Healthy City Development;
- Urban Heat Island and Livable City Development;
- Urban Heat Island and Smart City Development;
- Urban Heat Island and Resilient City Development.

For more information about the Special Issue, please click the following link:
https://www.mdpi.com/journal/buildings/special_issues/A71KG2GUQI

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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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