Special Issue

Building Resilience in Urban Areas: Exploring the Impact of Material Properties and Building Design

Message from the Guest Editors

The Special Issue aims to explore how advanced material properties and innovative building designs can be leveraged to create more resilient urban environments that are not only energy-efficient but also capable of withstanding environmental stressors such as extreme weather and urban heat islands. It also delves into the role of the geometry, orientation, and integration of buildings with urban canyons in improving energy performance and outdoor comfort. Therefore, this Special Issue welcomes the submission of studies on cutting-edge materials such as thermochromic, photoluminescent, and bio-inspired surfaces, alongside assessments of traditional materials in novel contexts. Furthermore, this Special Issue highlights the synergy between passive design strategies and material selection in optimizing energy efficiency, mitigating urban overheating, and fostering sustainable urban growth. The Special Issue also aligns with the goal of reducing urban energy demands, promoting climate adaptation, and enhancing the livability of cities.

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Message from the Editor-in-Chief

Urban Science is a scholarly international journal which provides a platform for the exchange of theories, ideas, methods, analyses, and comparative studies of urban and regional development. It is a peer-reviewed, open access journal that publishes high quality original articles, theoretical essays, critical reviews, research notes, and shorter communications. Its broad definition of "science" includes both quantitative and qualitative methods of social, environmental, and spatial analysis. There is no restriction on the maximum length of the papers.

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