

Nature-Based Solutions to Mitigate the Effects of Climatic Changes

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Message from the Guest Editors

The growing frequency and cost of climatic disasters demonstrate the vulnerability of built infrastructure. Nature-based solutions (NBS) are being recommended to mitigate climatic impacts, such as extreme heat, causing urban heat islanding (UHI), and extreme precipitation, causing urban flooding (UF).....

As the Guest Editors for this Special Issue, we cordially invite you to submit your up-to-date articles related to this topic including, but not limited to, the following aspects:

- The climate resiliency of built environments;
- Nature-based solutions in built environments;
- Sustainability assessment at the building, community and city levels;
- Green technologies and smart cities;
- The decarbonization of buildings and communities;
- Net-zero energy and energy-efficient infrastructures;
- Mitigation strategies to lessen urban heat islanding (UHI) and urban flooding (UF) impacts;
- Adaptation techniques to decrease the UHI and UF in built environment.

For further reading, please follow the link to the Special Issue Website at:

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Special Issue

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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.

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