Special Issue

Advances in Green, Low-Carbon, High-Performance, and Intelligent Building Materials and Structures

Message from the Guest Editors

This Special Issue aims to promote the exchange of academic research, industrial applications, and policymaking, share research results, explore future development directions, and jointly contribute to the realization of green, low-carbon, high-performance, and intelligent engineering construction. Review and research papers on areas including but not limited to the following are welcome:

- Research and application of green and low-carbon building materials;
- Conversion and utilization of building materials from urban solid waste;
- The design of buildings based on green and low-carbon concepts;
- Green, low-carbon, and high-performance steel and lightweight structures;
- Nano-modified high-performance concrete materials and structures;
- Green and low-carbon design of high-performance building structures;
- Research and application of intelligent construction materials;
- Building structure design based on artificial intelligence;
- Application of intelligent and automated technologies in engineering construction and structural health monitoring.

Guest Editors

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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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