Special Issue

Materials in Sustainable Buildings

Message from the Guest Editors

The concept of sustainable building is to reduce environmental load and energy consumption, select green building materials and reduce the generation of building solid wastes, and use advanced technology and equipment to recycle and reuse building solid wastes. Accurately understanding the research mechanism of solid waste utilization and the mechanical properties of green building materials, realizing resource utilization, improving the utilization rate of natural resources, and reducing environmental pollution are very important for the development of sustainable buildings. This Special Issue aims to collect the latest research results on green building materials and solid waste utilization. Topics of interest include but are not limited to:

- Solid waste resource utilization;
- Research progress of green building materials;
- Research on low carbon construction technology innovation;
- Development trend of 3D printing technology;
- Prospect of building materials for carbon reduction and carbon sequestration;
- Research and application progress of artificial materials.

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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