



Smart Structural and Material Solutions for Buildings Using Composite Materials

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Message from the Guest Editors

Dear Colleagues,

We are pleased to invite you to contribute to this Special Issue entitled “Smart structural and material solutions for buildings using composite materials”.

In recent decades, rapid development in the field of construction materials (e.g., concrete, steel, FRP, wood, etc.) has contributed to generating high-performance, cost-effective composite materials that possess superior durability and mechanical performance required for multiple applications. This Special Issue aims at collecting original research papers and reviews on the latest advances in composite materials, including but not limited to:

- Steel-concrete composites;
- FRP composites;
- Wood-concrete composites;
- Prestressed composites;
- Polymeric composites;
- Deconstructable composites;
- Lightweight composites;
- Fibrous composites;
- Innovative structural approaches;
- Structural optimization;
- New design methodologies and data-driven predictions models; etc..





Editor-in-Chief

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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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