Special Issue

Advances in Modern Structural Engineering: From Materials to Building Structures

Message from the Guest Editors

This Special Issue aims to capture and disseminate the latest research advancements that are reshaping the building structures. It serves as a platform for experts and scholars to explore the intricate interplay between advancements in materials science and their applications in building structures. It highlights the transformative impact of novel materials, such as highperformance concrete, metals, bio-based materials, and smart materials, on the design, performance, and durability of structures. This Special Issue also focuses on the innovations of building structures, such as fabricated and modular structures, steel structures, composite structures, bio-based structures, etc. The contributions within this Special Issue pave the way for groundbreaking advancements in modern structural engineering, ultimately contributing to the development of safer, more efficient, and environmentally friendly materials and buildings. You may choose our Joint Special Issue in Buildings.

Guest Editors

Prof. Dr. Zhihua Chen

Prof. Dr. Yiyi Zhou

Prof. Dr. Hongbo Liu

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Deadline for manuscript submissions

closed (25 August 2025)



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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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