Special Issue

Innovations in Building Materials and Infrastructure Design

Message from the Guest Editor

Building infrastructure is essential to modern society, supporting the seamless functioning of everyday life. However, with rapid urbanization and growing demands on infrastructure, there is an urgent need for innovations in building materials and infrastructure design. Our Special Issue, "Innovations in Building Materials and Infrastructure Design", invites high-quality submissions. We welcome research on a range of topics, from novel, sustainable building materials like recycled polymers and nanocomposites to cutting-edge infrastructure design concepts such as self-sensing and climateadaptive systems. This is an opportunity to showcase your work and contribute to the future of infrastructure, creating solutions that are more durable, sustainable, and cost-effective. The topics may cover, but are not limited to, the following:

- Sustainable building materials and innovations;
- Advanced infrastructure design concepts;
- Climate-adaptive and self-sensing systems;
- Durability and cost-effective solutions in infrastructure;
- Smart infrastructure and technology integration.

Guest Editor

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Deadline for manuscript submissions

20 November 2025



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/232673

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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).