Special Issue

Advances and Applications in Timber Structures

Message from the Guest Editor

Advancements in timber structures have been significant in recent years, driven by a combination of technological innovation, environmental concerns, and a renewed interest in sustainable building practices. Here, we present some key advancements and their applications. In summary, advancements in timber structures are making them a more viable, sustainable, and versatile option for modern construction, with applications ranging from residential and commercial buildings to large-span structures and innovative architectural designs.

This Special Issue seeks to explore the latest advancements and innovations in structural systems utilizing mass timber components and other materials. The topics of interest include, but are not limited to, the following:

- Engineered Wood Products (EWPs);
- Hybrid Structures;
- Prefabrication and Modular Construction;
- Digital Design and Manufacturing;
- Sustainability and Environmental Performance;
- Fire Safety and Durability;
- Innovative Architectural Applications;
- Research and Development.

Guest Editor

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Deadline for manuscript submissions

20 October 2025



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/207370

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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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