

## Special Issue

# Innovative Research Applied to Building Structures: From Materials Development to Structural Application

### Message from the Guest Editors

In civil engineering, frontier areas such as innovative building materials, new structural systems, and renovation technologies are developing rapidly and require validation through real-world case studies and pilot projects. This Special Issue aims to provide an open forum to discuss the various novel technologies in civil engineering. Topics of interest include, but are not limited to, material development (e.g., low carbon concrete, cement composites, waste recycling, high-performance materials), component design (e.g., high performance composite structural component, high performance damper, low carbon recycled concrete component, reinforcement technology), structural design (e.g., novel structural system, seismic isolation and damping, structural repair, upgrading and resilience), applications of artificial intelligence (e.g. intelligent design, inspection and monitoring, operation and maintenance), as well as field validation, experimental testing, and case studies demonstrating the application of these technologies in real-world projects.

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### Guest Editors

Dr. Chong Rong

Dr. Marco Carlo Rampini

Dr. Liangkun Wang

Dr. Yue Liu

Dr. Xuan Chen

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### Deadline for manuscript submissions

28 February 2026



## Buildings

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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.

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### Editor-in-Chief

Prof. Dr. David Arditi

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indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Construction and Building Technology) /  
CiteScore - Q1 (Architecture)

#### Rapid Publication:

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).