Special Issue

Building Safety Assessment and Structural Analysis

Message from the Guest Editors

Reinforced concrete or steel structures have been widely applied to high-rise buildings, stadiums, and bridges due to their robust characteristics. In order to enhance the safety and resilience of such buildings under the action of earthquake, wind loading, fire hazards, etc., this Special Issue, entitled “Building Safety Assessment and Structural Analysis”, aims to develop advanced numerical methods, analytical models, and experimental techniques for the assessment of corresponding joints, members, and structures. New research articles, case studies, and reviews related to novel design approaches of steel, concrete, and composite steel–concrete structures are welcome. Topics may include, but are not limited to, the following aspects:

- High-performance structural system;
- Flexural analysis of concrete members;
- Buckling behaviour of steel structures;
- Seismic design;
- Wind loading effects;
- Fire resistance;
- Machine learning based evaluation;
- Design theory and method;
- Numerical simulations.

Guest Editors

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Deadline for manuscript submissions

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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).