

Special Issue

Structural Dynamic Disaster and Protection

Message from the Guest Editors

Recently, hazardous dynamic loads originating from earthquakes, impacts (i.e.: vehicles, ships, rockfalls, and debris flows), and blasts due to natural disasters and accidents have caused catastrophic and devastating structural failures. The mitigation of those dynamic loads on structures and the development of protective structures have become the major concerns for the life safety and resilience of buildings and infrastructures. As a result, it is of great scientific significance and engineering application value to study the dynamic behavior, damage mechanism, and protection measures of engineering structures under dynamic loads. In this Special Issue, we are looking for papers and case studies of recent studies on structural dynamic disasters and protection. The guest editors cordially welcome high-quality papers focusing on, but not limited to, the following topics:

- Earthquake disaster and countermeasures;
- Vehicle impact on road and bridge infrastructure;
- Ship impact on bridge structures;
- Rockfall and debris flow impact;
- Blast effects on structures;
- Behavior and failure of materials/structures under dynamic loads;.

Guest Editors

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Dr. Rong Zhang

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Deadline for manuscript submissions

closed (30 April 2024)



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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).