



Structural Reliability, Resilience and Design of Buildings against Multi-hazards

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Message from the Guest Editors

We are launching the Special Issue of *Buildings* on “**Structural Reliability, Resilience and Design of Buildings against Multi-Hazards**”. The main aim of this Special Issue is to explore the recent challenges and developments in the field of reliability assessment, resilience evaluation/enhancement techniques, and structural design theories of individual building structures or clusters under multiple hazards.

Topics of interest include, but are not limited to, the following:

1. Fragility estimation of structures;
2. Resilience assessment;
3. Degradation laws and predictive model for life-cycle structural performance;
4. Reinforcement and renovation techniques for old buildings;
5. Performance evaluation and design theory of modular structures;
6. Design theories for new green low-carbon concrete materials;
7. Rapid calculation of dynamic responses in building clusters;
8. Blockage probability of post-disaster roads;
9. Dual control technology for vibration and seismic responses;
10. Multi-hazard design theory for engineering structures.





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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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