Special Issue

Seismic Performance of Seismic-Resilient Structures

Message from the Guest Editors

The ability of structures to perform under seismic loading is a crucial factor in protecting communities, minimizing economic loss, and facilitating rapid recovery in the aftermath of an earthquake. Structures play a vital role in maintaining continuity of service and safeguarding public welfare during and after extreme seismic events. This Special Issue invites innovative research aimed at enhancing the seismic performance of seismic-resilient structures, focusing on both novel design and retrofit methodologies that can improve structural robustness and adaptability against seismic hazards. Research topics of interest for this Special Issue include, but are not limited to, the following:
Development of innovative technologies for seismic resilience;
Self-centering structures;
Design methodologies for earthquake-resistant structures;
Retrofitting and upgrading strategies for existing structures;
Multi-level performance-based seismic design frameworks;
Life-cycle seismic performance assessment of structures;
Precast seismic resilient structures;
Case studies on the seismic performance of infrastructure systems;
FRP-strengthening methods for seismic performance enhancement.

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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