



Seismic Performance Assessment and Analysis of Buildings Structures and Critical Infrastructure

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Message from the Guest Editors

Dear Colleagues,

This Special Issue focuses on the assessment and analysis of the seismic performance of building structures (both new and old) and critical infrastructure. The evaluation of seismic performance is a crucial aspect in order to evaluate the impact of future large-magnitude seismic events on the exposed assets within a country or region. The seismic performance assessment of the critical infrastructure is extremely important considering their complexity and their large spatial extent and interdependencies.

The aim of this Special Issue is to collect and disseminate the latest research in these fields from world-leading researchers. Contributions related to numerical modelling, seismic vulnerability, risk assessment and analysis, seismic resilience, seismic design codes, experimental testing or strengthening, and rehabilitation of structures are most welcome.

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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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