



Sustainable Civil Engineering: Seismic Performance Analysis of Structures

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Deadline for manuscript submissions:

closed (26 March 2023)

Message from the Guest Editors

Earthquake can cause unprecedented disruption, recently displaying a trend of rapidly increasing damage and casualties, for two major factors: (1) urban development in seismic zones; (2) the vulnerability of older and built structures, including poorly constructed non-ductile concrete structures. Estimating and evaluating the seismic vulnerability of structures is critical for informed decision-making.

This Special Issue welcomes theoretical, numerical, and experimental developments as well as case studies on (but not limited to):

- Probabilistic seismic demand analysis of structures (bridges, buildings, dams, soil nailed walls, etc.);
- Performance-based design using seismic protection devices;
- Comprehensive and unified approaches for the PBSD of structures;
- Post-earthquake (after-shock) performance of structures;
- Risk-targeted and resilience-based seismic design of structures;
- Multi-hazard performance-based design of structures;
- Seismic performance of isolated structures, bridges, etc.;
- Near-fault and far-fault ground motions;
- Nonlinear vibration and numerical simulation of structures.





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Message from the Editor-in-Chief

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