



Advances in Design and Disaster Mitigation of Engineering Structures

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Message from the Guest Editors

The safety of engineering structures under natural hazards is a subject of great interest to researchers, and is important for protecting human life and reducing economic losses. This Special Issue is dedicated but not limited to current research on experimental, theoretical, computational and relevant research works on advanced methods in the design and disaster mitigation of engineering structures, including the following: analyzing and simulating natural hazards; damage assessment of engineering structures under natural hazards; modelling and applications of new construction materials for structural engineering; design methodologies of innovative structural components and systems; advanced testing and modelling technologies; maintenance, repair and retrofit of existing structures; vulnerability, risk and reliability assessment of engineering structures under earthquakes, winds, fires and tsunami; and advanced methods for the evaluation and design of resistance and resilience of structural systems.

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues/Disaster_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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