

Special Issue Reprint

Disaster Mitigation, Risk Reduction, and Resilience Design of Engineering Structures

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The disaster mitigation, risk reduction, and resilience design of engineering structures under natural hazards are topics of great interest, as well as being crucial for protecting human life and reducing economic losses. In recent decades, with the help of emerging knowledge regarding the mechanisms of natural hazards, new methods and facilities for disaster mitigation and risk reduction are being developed. Furthermore, resilience designs have been proposed for the improvement of post-disaster retrofits and repairs for modern engineering structures. This Special Issue is dedicated, but not limited, to current research on theoretical, computational, experimental, and relevant research works regarding advanced methods in the disaster mitigation, risk reduction, and resilience design of engineering structures, including methodologies and innovations on mechanical performance evaluation; modeling technologies and simulations of failure mechanisms; methodologies regarding vulnerability, risk, reliability, and resilience assessment; applications of disaster mitigation and risk reduction; and innovative and advanced design methodologies for the resilience design of engineering structures under earthquakes, fires, winds, and tsunamis.

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