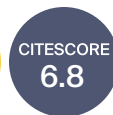




sustainability



Special Issue Reprint

Damage Diagnosis and Safety Assessment of Bridge Structures under Multiple Hazards

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Edited by

Kai Wei

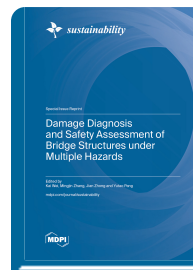
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The states of bridge structures decline over time due to various degradation processes, such as creep, corrosion, and cyclic loading. During its life cycle, a bridge also faces the great threat of multiple hazards, such as winds, earthquakes, collisions, waves, landslides, and so on. Structural damages in an existing bridge affect operational and structural safety and weaken the sustainability of bridges. Therefore, advanced damage diagnosis techniques and safety assessment methods are strongly required to ensure structural safety and achieve infrastructure sustainability. This Special Issue aims to bring together recent scientific developments in probabilistic hazard analysis, structural exposure models, damage diagnosis methods, testing and measurement techniques, dynamic behavior and protection technology, damage mechanisms, risk assessment framework, and resilience-based approaches. Since we have past one year since this Special Issue opened, thirteen papers have been published, the majority of which focus on the structural safety assessment of bridges under wind, earthquake, collision, wave, etc. The Guest Editors believe that this reprint will provide important theoretical and technical support for bridge damage diagnosis and safety assessment and promote communication and cooperation between design, construction, research, teaching, and production.



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