



Probabilistic-Based Techniques for Damage Assessment of Structures and Infrastructures: Towards New and Integrated Perspectives for Structural Health Monitoring

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Message from the Guest Editors

Civil structures and infrastructures are susceptible to damage caused by natural hazards and extreme events such as earthquakes, strong winds and flooding, as well as material degradation and increasing traffic actions. Data-driven structural health monitoring (SHM) techniques have emerged as valuable tools for assessing the current structural state of conservation.

This Special Issue aims to highlight and discuss new developments, inviting high-quality contributions that focus on the investigation of the current state-of-the-art, recent advancements, practical applications, and future perspectives in SHM for structures and infrastructures. The contributions can cover the following topics:

- In-depth reviews and innovative contributions in probabilistic-based SHM techniques for structures and infrastructures.
- Recent developments in probabilistic-based techniques as decision-support tools for evaluating structural integrity.
- Recent advancements in SHM technologies.
- Novel methods for data fusion.
- The use of surrogate modeling for automated damage identification.
- The application of life-cycle cost analysis to reduce operational costs and risks associated with SHM.



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Message from the Editor-in-Chief

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