Special Issue

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

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.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2024)

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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