Special Issue

Structural Health Monitoring of Buildings Based on Advanced Computational and Experimental Techniques

Message from the Guest Editors

The structural health monitoring of buildings constitutes an area of research dedicated to ensuring the safety, durability and efficiency of constructed environment. Computational and experimental techniques are used to assess the integrity of buildings along time and to detect potential damage based on numerical and experimental methods. In this Special Issue, papers dedicated to experimental and/or numerical studies on structural health monitoring are welcome. Applications of these practices in buildings, bridges and other structures are also welcome. This Special Issue will accept original research, case studies and state-of-the-art review papers. Papers published in this Special Issue should describe original methods and studies in different topics of both science and engineering, such as mechanics of structures, dynamics of structures and nonlinear analysis. This Special Issue will be of interest to researchers and academics working in fields of service states, the structural analysis of buildings, infrastructure management and historical construction assessment.

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Deadline for manuscript submissions

closed (31 December 2024)

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/171285

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About the Journal

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.

Editor-in-Chief

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