

Special Issue

Structural Health Monitoring, Damage Detection and Long- Term Performance

Message from the Guest Editors

With the increase in natural hazards, the degradation of existing infrastructure, and advances in computational methods, structural health monitoring (SHM) has become a promising technique for assessing civil structural conditions. This Special Issue, "Structural Health Monitoring, Damage Detection and Long-Term Performance", will provide an overview of the existing knowledge on new approaches for building monitoring. Original research, theoretical and experimental work, case studies, and comprehensive review papers are invited to be submitted for possible publication. Relevant topics to this Special Issue include, but are not limited to, the following subjects:

- New approaches for SHM;
- Short and long-term monitoring;
- New sensors and sensorial networks;
- Digital methodologies for monitoring applications;
- Monitoring strategies for construction sustainability;
- Cultural heritage.

Guest Editors

Dr. Esequiel Mesquita

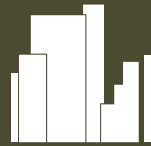
Prof. Dr. Humberto Varum

Dr. Paulo Fernando da Costa Antunes

Dr. Antonella D'Alessandro

Deadline for manuscript submissions

closed (20 July 2025)



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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

Prof. Dr. David Arditi

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).