



Advances in Structural Health Monitoring and Damage Identification

Guest Editors:

Dr. Shuli Fan

State Key Laboratory of Coastal
and Offshore Engineering, Dalian
University of Technology, Dalian
116024, China

Dr. Weijie Li

School of Civil Engineering,
Dalian University of Technology,
Dalian 116024, China

Deadline for manuscript
submissions:

closed (31 May 2024)

Message from the Guest Editors

We are pleased to invite you to contribute to the Special Issue "Advances in Structural Health Monitoring and Damage Identification".

Structural health monitoring (SHM) enables us to implement damage identification strategies for civil engineering structures using sensory systems. It provides additional information to evaluate the safety of structures throughout their life. Recent advances in sensors, intelligent data analytic tools and damage identification methods have opened a new paradigm for SHM as a data drive remedy for structural safety with the benefits of cost-effectiveness and real-time operation.

The aim of this Special Issue is to bring together original research and review articles discussing new smart sensors, sensor networks, intelligent SHM techniques, approaches to damage detection, model updating and safety evaluation, and the design and implementation of SHM systems for practical civil infrastructure.





Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and Management Program,
Department of Civil,
Architectural, and Environmental
Engineering, Illinois Institute of
Technology, 3201 South
Dearborn Street, Chicago, IL
60616, USA

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Civil*) / CiteScore - Q1 (Architecture)

Contact Us

Buildings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/buildings
buildings@mdpi.com
X@Buildings_MDPI