Special Issue

Advanced Technologies in SHM, Performance Evaluation, and Reliabilty Analysis

Message from the Guest Editor

Structural health monitoring (SHM), as a technique for monitoring and evaluating structural health status, has been widely concerned and applied in recent years. It can not only monitor the vibration and strain of the structure in real time, but also provide an accurate assessment of the health status of the structure. The performance evaluation of a structure is an important step to ensure its long-term operation and safety. By using SHM technology, we can monitor the vibration characteristics and deformation of the structure in real time, and provide data support for the performance evaluation of the structure. With SHM technology, we can monitor the health status of the structure in real time and propose corresponding improvement measures. Potential topics include, but are not limited to: Structural health monitoring; Performance evaluation; Reliability analysis; Application of new sensor technology in structural health monitoring; Application of machine learning to performance evaluation; The development of nondestructive testing technology and its application in reliability analysis.

Guest Editor

Dr. Qi-Ang Wang

School of Mechanics and Civil Engineering, China University of Mining and Technology, Xuzhou 221116, China

Deadline for manuscript submissions

20 November 2025



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/180850

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

