



Advances in Modal Testing, Nondestructive Testing and Structural Health Monitoring

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Message from the Guest Editors

This Special Issue aims to summarize the recent advances in modal testing, nondestructive testing and structural health monitoring (SHM), considering the various approaches that have been evolved and put forward for application in mechanical and aerospace engineering. New simulation approaches have also experienced extensive studies for their use in structural dynamic analysis, such as algorithm-based structural optimization. This Special Issue also welcomes investigations into algorithm development, deep learning, signal processing, data management and so on. High-quality investigations regarding modal testing and nondestructive testing based on the applications of mechanical and aerospace engineering are encouraged, as are reviews summarizing their advances over recent years.

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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.

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