

Special Issue

Recent Developments and Applications in Vehicle-Assisted Structural Health Monitoring for Infrastructures

Message from the Guest Editors

In recent decades, structural health monitoring (SHM) has become a critical area of focus, contributing significantly to the development of a sustainable society. The purpose of this Special Issue is to collect state-of-the-art developments and applications in vehicle-assisted SHM for infrastructures, with its scope including, but not limited to, the following topics:

- Infrastructural operational modal identification and analysis;
- Vehicle-assisted damage detection of infrastructures;
- Road roughness/railway irregularity estimation and monitoring using vehicle responses;
- Anomaly detection in vehicle-induced data based on machine/deep learning algorithms;
- Infrastructural health monitoring using vehicle-induced responses;
- Monitoring of bridge traffic load distribution;
- Application of unmanned aerial vehicles (UAVs) for structural health monitoring of infrastructures;
- Investigations of vehicle–structure interaction theories;
- Drive-by/fly-by infrastructural health monitoring using vehicles as moving sensors;
- Modal parameter identification of bridges from responses of passing vehicles;
- AI applications for direct/indirect bridge health monitoring;
- Crowdsensing for bridge condition assessment.

Guest Editors

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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