Special Issue

Structural Health Monitoring for Bridge Structures, 2nd Edition

Message from the Guest Editors

Structural health monitoring (SHM) has emerged as a crucial field in ensuring the safety, reliability, and longevity of bridge structures. With the increasing complexity and aging infrastructure of bridges worldwide, the need for effective monitoring systems has become more pronounced than ever. The application of SHM techniques enables real-time assessment, the early detection of potential issues, and proactive maintenance strategies to prevent catastrophic failures. Over the past few years, artificial intelligence and big data technology have greatly promoted the development of structural health monitoring, assessment, and maintenance.

- Sensor technologies and data acquisition systems for bridge monitoring;
- Advanced signal processing and data analysis techniques for structural health assessment;
- Non-destructive testing and evaluation methods for bridge structures;
- Wireless sensor networks and IoT applications in bridge monitoring;
- Structural modeling and simulation for health monitoring and prognosis;
- Remote sensing and imaging techniques for bridge inspection and monitoring;
- Risk assessment and decision-making frameworks based on SHM data...

Guest Editors

Dr. Yi Zhou
Prof. Dr. Guangdong Zhou
Dr. Laura Ierimonti

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

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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 multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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