

## Special Issue

# Application of Monitoring System in Bridge Reliability Assessment

### Message from the Guest Editors

Bridge condition assessment by using structural health monitoring (SHM) data has been recognized as a promising condition-based preventive maintenance method. The monitoring concept for structural systems has undergone a rapid evolution over the past decade, and it still plays an important role in the efficient use of structural monitoring data in the reliability assessment and prediction models. This Special Issue will be based on monitoring systems to effectively monitor the structural reliability assessment process, show the use of monitoring data to develop predictive models, and how it plays an important role in structural health testing and reliability analysis. Keywords: bridges; structural reliability; monitoring; monitoring systems; non-linear modeling techniques; reliability assessment methods; reliability estimation; structural health monitoring (SHM); finite element model

### Guest Editors

Dr. Hongwei Huang

Department of Bridge Engineering, Tongji University, Shanghai 200092, China

Dr. Ye Xia

Department of Bridge Engineering, Tongji University, Shanghai 200092, China

### Deadline for manuscript submissions

closed (30 November 2022)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/126201](https://mdpi.com/si/126201)

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

[mdpi.com/journal/applsci](https://mdpi.com/journal/applsci)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## 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 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

---

### 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 )