

Special Issue

Advances in Structural Health Monitoring and Industry 5.0 Innovations for Bridge Management and Conservation

Message from the Guest Editors

Within the context of bridge management and conservation, this Special Issue investigates how Industry 5.0 is transforming Structural Health Monitoring (SHM), i.e., the process of assessing the condition of structures in real-time or at regular intervals. Specifically, we will explore how emerging technologies—such as data acquisition, automated processes, and digital information and analysis—are revolutionizing the ways in which bridges are monitored, assessed, and maintained. These innovations enable better damage identification, facilitating proactive maintenance strategies and enhancing the overall resilience and efficiency of bridge infrastructures. We invite contributions on:

- Sensor placement optimization.
- Automation of damage detection, localization, and quantification.
- Data mining and data fusion strategies for bridge SHM applications.
- Data-driven, model-based, and hybrid SHM novel strategies.
- Remaining bridge service life prediction.
- SHM-aided decision-making processes.
- Smart sensors, AI-driven analytics, and digital twins.

Guest Editors

Dr. Alejandro Jiménez Ríos
Dr. Pier Francesco Giordano
Dr. Alberto Barontini

Deadline for manuscript submissions

30 June 2026



Infrastructures

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 6.0



mdpi.com/si/216438

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

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





Infrastructures

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 6.0



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article, review or short communication for consideration and publication in *Infrastructures* (ISSN 2412-3811). There is no restriction on the length of the papers. *Infrastructures* is published in open access format. The scientific community and general public have unlimited free access to the content as soon as it is published. *Infrastructures* is supported by the authors by the payment of article processing charges for accepted manuscripts. Please consider *Infrastructures* as an exceptional opportunity to publish your work.

Editor-in-Chief

Dr. Pedro Arias-Sánchez

Applied Geotechnologies Group, Department of Natural Resources and Environmental Engineering, School of Mining Engineering, University of Vigo, 36310 Vigo, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

Journal Rank:

JCR - Q2 (Construction and Building Technology) /
CiteScore - Q1 (Building and Construction)