

# Special Issue

## Reliability-Based Service-Life Assessment of Aging Bridges

### Message from the Guest Editors

The normal serviceability of bridges plays an essential role in physically supporting a traffic system's functionality. Many bridges are exposed to severe environmental or operational conditions during their service life, which may trigger the reduction of structural performance and remaining service-life below expected. Structurally or functionally deficient bridges may further lead to catastrophic economic or social losses for the surrounding community. Motivated by the costly disposition of the degraded bridges, as well as the severe failure-induced consequences, it is necessary to assess the bridge's capacity to fulfill the safety requirements during the considered reference period under a probability-based framework, with which the decision-makers can optimize the maintenance or enhancement strategies accordingly.

This Special Issue provides a platform for key researchers in the field of bridge engineering to present their latest research outputs. Contributions addressing the reliability-based safety and service-life assessment of aging bridges, both theoretical and experimental, are welcome.

---

### Guest Editors

Dr. Cao Wang  
Prof. Dr. Guoji Xu  
Prof. Dr. Zhenhao Zhang

---

### Deadline for manuscript submissions

closed (31 October 2021)



## Infrastructures

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.9  
CiteScore 6.0



[mdpi.com/si/64024](https://mdpi.com/si/64024)

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