

Special Issue

Sustainable Design and Upgrading of Bridges: From Life-Cycle Thinking Principles to Life-Cycle Analysis

Message from the Guest Editors

This Special Issue aims to collect high-quality contributions that promote a shift toward integrated and forward-looking strategies for bridge retrofitting/replacement. We welcome original research articles and comprehensive reviews, including (but not limited to) the following topics, applied to bridge structures:

- Life-cycle assessment and cost analysis for retrofitting/replacement.
- Performance-based and sustainability-oriented design methods.
- Probabilistic modelling of deterioration and reliability over time.
- Climate-adaptive strategies and multi-hazard design approaches.
- Digital tools for life-cycle management.
- Case studies on (sustainable) bridge design or retrofitting.

Guest Editors

Dr. Nicola Scattarreggia

Sapienza University of Rome, Rome, Italy

Dr. Ricardo Monteiro

Scuola Universitaria Superiore IUSS Pavia, Pavia, Italy

Dr. You Dong

Department of Civil and Environmental Engineering, Hong Kong Polytechnic University, Hong Kong 999077, China

Deadline for manuscript submissions

closed (31 March 2026)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/247668

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

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





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



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



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)