

Special Issue

AI-Driven Innovation: Shaping the Future of Sustainable Civil Infrastructure

Message from the Guest Editors

Civil infrastructure systems—comprising transportation networks, utilities, buildings, and other essential facilities—are vital to the functioning of modern societies; however, these systems face mounting challenges related to resource scarcity, climate change, and increasing demand for resilience and sustainability. Artificial intelligence (AI) presents a transformative opportunity to address these challenges, optimizing the design, construction, operation, and maintenance of civil infrastructure while minimizing its environmental footprint. This Special Issue focuses on the role of AI in advancing the sustainability of civil infrastructure systems, inviting contributions that explore innovative applications, interdisciplinary methodologies, and practical implementation including, but not limited to:

- Sustainable infrastructure design
- Smart infrastructure management
- Resilient infrastructure
- Lifecycle assessments
- Digital twin applications
- Circular economy in construction
- Energy-efficient systems
- Sustainability policy and decision-making

Guest Editors

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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

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