

## Special Issue

# Transforming Built Environment Performance through AI-Driven and Physics-Based Simulations

### Message from the Guest Editors

As the built environment faces increasing demands for energy efficiency, sustainability, and occupant health and well-being, the convergence of artificial intelligence (AI), machine learning (ML), and physics-based methods provides a powerful computational toolkit for advancing performance modeling and assessment. By leveraging the strengths of AI/ML alongside the interpretability and precision of physics-based models, this approach enhances predictive accuracy, improves design processes, and streamlines operations. This Special Issue explores how these emerging technologies can be applied to optimize design, improve operational efficiency, and contribute to the development of smarter, more sustainable built environments across various scales, from individual buildings to urban environments.

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### Guest Editors

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### Deadline for manuscript submissions

3 March 2025



## Architecture

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## About the Journal

### Message from the Editor-in-Chief

The journal Architecture is an outstanding platform for new ideas and for reporting the outcomes of your research. The subjects sought are wide ranging and include design strategies, form, and technology. The need to be innovative in a rapidly changing profession and building environment make this journal the ideal place to publish. We are open to creativity and out-of-the-box thinking.

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### Editor-in-Chief

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### Author Benefits

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