

Special Issue

Advances in Structural Dynamics of Construction Materials

Message from the Guest Editors

Structural dynamics of construction materials comprise a rapidly evolving field that analyzes material performance when subjected to external forces and vibrations, such as wind, earthquakes, blasts, and traffic. Significant advancements in recent years in the structural dynamics of construction materials provide theoretical guidance for the planning, design, performance evaluation, and maintenance of civil engineering structures. This Special Issue is open to research works developed based on these topics. We invite the submission of new research, case studies, projects, reviews, and state-of-the-art discussions as well. Keywords:

- construction materials
- mechanical analysis
- dynamic tests
- multi-scale simulation
- linear and nonlinear dynamics
- elastoplastic dynamics
- fracture mechanics
- granular mechanics
- soil/structure interactions
- seismic engineering
- base isolation and seismic dampers
- blasts and impacts
- structural health monitoring
- damage detection

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Deadline for manuscript submissions

closed (20 September 2025)



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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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