Special Issue

Structural Mechanics: Theory, Method and Applications

Message from the Guest Editors

Structural mechanics methodology is continually evolving to predict the behavior of emerging materials and hybrid configurations. Additionally, rapidly evolving computational resources now provide the capability to simulate complex structural scenarios spanning length and time scales. Additionally, machine learning offers the potential for data-centric engineering to identify relationships and characterize structural mechanics behaviors using high fidelity physics-based models. Papers that address advances in these and other emerging areas are sought for this Special Issue focusing on structural mechanics topics that advance the forefront of knowledge in predicting and understanding structural behavior. Keywords

- multi-scale methods
- stochastic volume elements
- machine learning
- numerical methods
- novel applications
- hybrid and emerging materials
- damage analysis

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Deadline for manuscript submissions

closed (20 February 2025)

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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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