Special Issue

Numerical Modeling and Mathematical Optimization in Structural Mechanics

Message from the Guest Editors

We are pleased to announce a Special Issue of the journal Mathematics entitled "Numerical Modeling and Mathematical Optimization in Structural Mechanics". This Special Issue aims to gather cutting-edge research and innovative methodologies in the field of structural mechanics, with a particular emphasis on numerical modeling and mathematical optimization techniques that have emerged as powerful tools in addressing the increasingly complex challenges faced by engineers and researchers in this domain. Contributions that demonstrate the integration of numerical modeling with mathematical optimization techniques, as well as interdisciplinary approaches that combine concepts from different fields such as mechanics, mathematics, and computer science, are highly welcomed. The topics of interest for this Special Issue include, but are not limited to the following:numerical modeling; mathematical optimization; structural mechanics; finite element analysis; sustainable design; topology optimization; structural health monitoring; computational mechanics; nonlinear analysis; machine learning; stochastic modeling.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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