Special Issue

Mechanical Structures: Fatigue Behavior, FEM Modeling and Design Best Practices

Message from the Guest Editors

As materials and structures are increasingly subjected to complex loading conditions, understanding their fatigue behavior and strain-rate properties is essential for ensuring long-term reliability and safety. Innovations in design practices and computational modeling, such as finite element modeling (FEM), have further highlighted the need for interdisciplinary research in this field. By integrating experimental data with advanced simulation techniques, engineers can optimize structural designs and develop innovative materials and production technologies for a wide range of applications. In this context, we are pleased to announce a Special Issue on Mechanical Structures: Fatigue Behavior, FEM Modeling and Design Best Practices. This Special Issue will explore the latest advancements in research on innovative materials (such as functionally graded materials and metamaterials), design procedures, and numerical and analytical methodologies.

Guest Editors

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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.

Editor-in-Chief

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