Special Issue

Material Fatigue Analysis and Modeling in Structural Engineering

Message from the Guest Editor

Preventing failure has been one of the main goals of engineering research in recent years. Material fatigue failure is the main failure form of the structure, so fatigue strength and fatigue life of a structure are the main content of structural engineering research. In various types of machinery, fatigue failure parts account for 60-70% of failure parts. Fatigue life prediction of materials can be modeled through deterministic and probabilistic analyses. This Special Issue covers the broad topic of structural integrity of materials, and it is concerned with the modeling, assessment, and reliability of structural elements of any scale. We welcome the submission of research articles, review articles, as well as short communications. Keywords: Fracture Mechanics; Failure Mechanisms; Constitutive Modeling; Fatigue Screening; Fatigue Damage Assessment

Guest Editor

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Deadline for manuscript submissions

closed (22 February 2022)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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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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