

Special Issue

Multiscale Fatigue Design

Message from the Guest Editor

With the advance of new materials in different engineering fields, and in particular of nano-materials and thin coatings, attention has to be paid to the fracture mechanism at different scale levels. This issue is not easy to deal with because, in small bodies, the high ratio between surface and volume makes the local discontinuities present in the material non negligible. This Special Issue embraces interdisciplinary work aimed at understanding and deploying mechanisms involved in fatigue damage and failures occurring at all scale levels (from nano to macro), advancing experimental and theoretical failure analyses, modelling of the structural response with respect to both local and global failures, and structural design that accounts for scale and time effects in preventing catastrophic failures of components and structures.

Guest Editor

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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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