

Special Issue

Advanced Numerical Approaches for Crack Growth Simulation

Message from the Guest Editors

This Special Issue of Applied Sciences aims at gathering papers presenting the latest advances in numerical approaches for crack-growth simulation. The focus will be, in particular, but not exclusively, on the simulation of fracture behavior of traditional or innovative materials (composites, functionally graded, additively manufactured, etc.) through the usage of hybrid numerical approaches (e.g., FEM-BEM hybrid methods).

The submission of papers on numerical simulation, possibly reporting experimental work to validate numerical analyses, is welcome. The application of damage and fracture mechanics concepts, the appraisal of stress concentration effects, and the consideration of residual stresses and anisotropic behavior will be of particular interest for a range of structural applications that can be foreseen to go from biomedical engineering to the aerospace sector. The paper should possibly highlight the enhanced accuracy, computational advantages, and pre/post-processing time efficiency coming from the use of different numerical methods.

Guest Editors

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Deadline for manuscript submissions

closed (10 June 2022)



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About the Journal

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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