Special Issue

Advances in Computational Modeling of Damage and Failure of Composite Materials

Message from the Guest Editors

Composite materials are increasingly finding applications in various industries thanks to their potential in weight reduction, damage tolerance, multi-functionalities, etc. However, their damage and failure remain challenging to predict. This Special Issue aims to collect the recent advances in computational models of the damage and failure of composite materials. This includes both traditional mechanically loaded composites and novel multi-functional composites. The scope of the models includes, but is not limited to, enriched finite element technologies, meshless/particle-based methods, multi-scale/global–local methods, and data-driven or machine-learning-based surrogate methods. Contributors are invited to present your recent novel work on some of the above-mentioned topics. Thank you and we look forward to receiving your recent work in our Special Issue!

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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