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Multiscale Reliability Analysis of Stiffened Composites

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Deadline for manuscript submissions:

closed (31 December 2023)

Message from the Guest Editors

Dear Colleagues,

Stiffened composites have excellent damage tolerance, outstanding structural efficiency, and good design ability, which are widely used to load bearing structures in aerospace. With the improvement of equipment performance, the reliability of stiffened composites is increasingly becoming a topic of concern. Because of the complexity of stiffened composite design and the diversity of composite materials, its failure mechanism is very complex, and its reliability analysis is faced with great challenges. Therefore, we need to carry out multiscale failure mechanism research, from microscopic parameters to the macroscopic mechanical properties, and quantify the uncertain factors of design, molding, machining, and assembly for stiffened composites, and then develop multiscale reliability analysis methods to improve the reliability of stiffened composites.

This Special Issue will focus on the failure behaviors and mechanical properties of stiffened composites and the reliability analysis model considering the mesoscopic and macroscopic parameters. Submissions of original research articles, review articles, and case studies are all welcome.













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Message from the Editor-in-Chief

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