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Multiscale Analysis of Advanced Fiber Materials and Structures

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Message from the Guest Editors

Fiber-reinforced composites have been successfully applied in many industry sectors over the last few decades because of their excellent strength-to-weight ratio, durability, and technical advantages, and they are now spreading into more fields. To model fiber materials and structures with the aim of understanding their behaviors and failure mechanisms (in which internal length scales are not negligible when compared to structural length scales), multiscale analysis should be utilized to consider interactions among constituent materials to fully explore how constituents are used.

The present Special Issue focuses on theoretical and experimental methods for the multiscale analysis of advanced fiber-reinforced composite materials and structures. As far as materials are concerned, we are interested in anisotropic, nonlocal, lattice and multi-physics behaviors. In addition, this Special Issue aims to attract contributions on multi-scale structural modelling modeling, 3D-printed structures and computer-aided structural engineering.





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Message from the Editor-in-Chief

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