

Special Issue

Multiscale Analysis of Advanced Fiber Materials and Structures

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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Deadline for manuscript submissions

closed (20 November 2023)



Materials

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Impact Factor 3.1
CiteScore 5.8
Indexed in PubMed



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Message from the Editor-in-Chief

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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