Special Issue

Advances in Carbon Fiber/Resin Matrix Polymer Composites

Message from the Guest Editors

Recent carbon fiber/resin matrix polymer composite advancements have led to significant innovation across various sectors. Automated techniques like fiber placement and tape laying have improved manufacturing processes, and researchers have focused on enhancing carbon fiber properties as well as exploring tailored fiber architectures. Novel resin systems, such as advanced thermosetting and thermoplastic matrices, have contributed to superior mechanical properties. Nanotechnology, such as carbon nanotubes and graphene, has been used to strengthen these materials. Multifunctional composites have emerged, incorporating sensors, actuators, and thermoelectric elements for applications like structural health monitoring and energy harvesting. This Special Issue will invite papers in this field.

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Deadline for manuscript submissions

closed (20 July 2025)



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Impact Factor 3.2 CiteScore 6.4 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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