Special Issue

Progress in Porous Nanofibers: Fabrication and Applications

Message from the Guest Editors

Thermal management fiber materials (TMFMs) represent a pivotal advancement in material science, playing a critical role in a wide array of applications. These materials are engineered to control the transfer and dissipation of heat, making them essential in various industries, from electronics and aerospace to textiles and building construction. The efficient management of heat is crucial for enhancing energy efficiency, improving the performance and longevity of devices, and ensuring comfort and safety in diverse environments. Advanced TMFMs often incorporate novel microscale and nanoscale materials to achieve the desired thermal properties. Techniques such as electrospinning and nanocomposite integration allow for precise control over fiber morphology and composition. Materials like carbon fibers, phase-change materials (PCMs), and aerogels are commonly used to create TMFMs with tailored thermal characteristics. In this Special Issue, we would like to collect both review and research articles on TMFM synthesis, functionalization, and various applications.

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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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