

Special Issue

Biomimetic Construction and Mechanism of Biomass Composite Materials: Innovative Pathways from High-Value to Intelligent Applications

Message from the Guest Editor

Biomass composite materials, inspired by the intricate designs and functionalities found in nature, are emerging as a promising frontier in materials science. These materials offer innovative pathways for advancing technologies and applications, particularly in the pursuit of sustainable and high-performance solutions. The construction of biomass composites through biomimetic approaches not only enhances their structural integrity but also imparts unique functionalities, including responsiveness to environmental stimuli such as pH, light, magnetic or electric fields, temperature, etc. These intelligent properties open up new and emerging applications across various industries. In this Special Issue (SI), We aim to explore innovative pathways from high-value applications to intelligent applications, emphasizing the integration of biomimetic strategies and advanced material science. The SI will cover a broad range of topics related to the latest advancements and applications of biomass composite materials. We encourage potential authors to submit research that pushes the boundaries of current knowledge and explores new frontiers in this exciting field.

Guest Editor

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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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