



Recent Advances in Bioinspired Polymers

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Message from the Guest Editors

Bio-inspired lignocellulose-based nanomaterials are promising for potential applications in developing unprecedented products. The importance of these nanomaterials is tremendous, ranging from advanced applications in bionanocomposites, drug delivery, tissue engineering, and sensors, thanks to their attractive and excellent characteristics such as abundance, high aspect ratio, excellent mechanical properties, renewability, and biocompatibility. Thus, innovation via bio-inspired lignocellulosic nanomaterials has produced some great advances in multifunctional applications through applying bio-mimetic strategies. Therefore, recent advances in nanotechnology have been explored in order to isolate and engineer nanomaterials from different biological origins and to provide unprecedented features for advancing low-carbon or carbon-free nanobiocomposites. A key aspect of this Special Issue is the search for new strategies in the acquisition and use of lignocellulosic materials with an emphasis on both economic sustainability and energy efficiency.





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Message from the Editor-in-Chief

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