







Special Issue Reprint

# Biopolymers and Biodegradable Polymers: Synthesis, Properties, Application and Degradation Behavior

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In an era defined by environmental consciousness, this Reprint, titled "Biopolymers and Biodegradable Polymers: Synthesis, Properties, Application, and Degradation Behavior," emerges as a pivotal resource. This Reprint bridges the gap between fragmented research, offering a comprehensive and unified exploration of the burgeoning field of sustainable materials. It delves into the fundamental principles of biopolymer synthesis, unraveling the intricate relationships between molecular structure and material properties. Readers will gain a thorough understanding of the diverse applications that leverage the unique characteristics of these eco-friendly polymers, as well as a critical analysis of their degradation behavior. The chapters in this Reprint cover diverse topics, ranging from biobased pavement stabilization to advanced polymer design, non-woven fabrication, and chitosan films. Readers can gain knowledge regarding deep learning for cell migration, PLA crystallization, and applications spanning ternary blends, flame retardants, dental polymers, and tissue regeneration. This Reprint shines a light on biopolymers' transformative potential for a greener future.



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