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Advances in Polymeric Biomedical Materials

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Message from the Guest Editors

Dear Colleagues,

Over the past two decades, the interdisciplinary field of biomaterials and tissue engineering has experienced dynamic and rapid growth. Polymeric biomaterials possess many advantages due to their unique tailorability of chemical structures and physical properties, biodegradability, and the feasibility of fabricating them into medical devices for applications including tissue replacement, drug delivery, cancer therapy, and nonviral gene therapy. Based on the principles of polymer science and engineering, numerous strategies have been applied to develop biomaterials with controllable physical properties to satisfy diverse clinical needs by tuning their structural parameters and morphologies at different length scales. Polymeric biomaterials can be incorporated with natural materials and inorganic nanoparticles to achieve novel, unique properties and better performance. Biomimetic and intelligent polymeric systems have also been investigated to advance our material design strategies.





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Message from the Editor-in-Chief

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