

Special Issue

Advances in Polymeric Biomedical Materials

Message from the Guest Editors

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.

Guest Editors

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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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