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High-Performance 3D Printing Polymers

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Message from the Guest Editors

Three-dimensional printing technology is commonly used in many fields. The multiple polymers based on different 3D printing technic demonstrate diversified and anisotropic material behavior, such as fused deposition modeling, which produces the part with the melting material; or the stereo-lithography apparatus method, which uses UV irradiation to cure liquid resin. The process method of 3D printers, i.e., the forming temperature, layer thickness, build direction, density, infill pattern, etc., affects not only the combination of polymer chains and the bond strength of different fibers but also the manufacturing efficiency and mechanical and thermal properties of the printed material. With the aim of comprehending the effect of the 3D printing process method to the material nature, of Polymers invites scholars' this Special lssue contributions on multiple aspects, including formulations and experimental analyses to discuss the mechanical, phase and chemical behavior of 3D-printed polymers and polymer composites in different fields, such as traditional manufacturing, aerospace, and biological or medical applications.



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Message from the Editor-in-Chief

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