



Applications of Electrospinning-Based 3D Architecture Nanomaterials

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Message from the Guest Editor

Dear Colleagues,

Living tissues and organs are formed from different scales of fibrous structures such as intracellular microtubules, extracellular matrices around cells, and their aggregates. Tissue engineering aims to construct such ordered and hierarchical fibrous structures from cells. Among various materials, electrospun nanofibers are expected to be useful as cell scaffold materials because of the facileness of structure control and the availability of various materials. Previously flat fiber sheets have been cut and combined to produce three-dimensional structures, however, in recent, the electrospinning technology enabled to fabricate seamless 3D structures with hierarchically controlled nano- and micro-structures from nonwoven fabrics.

The proposed Special Issue is inviting original articles in form of communications, full papers, and reviews demonstrating the progress in the research fields of 3D and hierarchical structure control technology by the electrospinning toward healthcare and medicinal application, including basic research on 3D electrospinning, nanofiber-based cell constructs, and biological responses on the geometrically-controlled nanofiber-based scaffold.





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Message from the Editor-in-Chief

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