



Electrospinning Nanofibers: Synthesis and Applications

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Message from the Guest Editor

Dear Colleagues,

Electrospinning is a modern and efficient method which uses an electric field to produce fine fibers of a diameter down to nanoscale even with milligrams of materials. It encompasses the utilization of various small molecules/biomolecules, synthetic or natural polymers, ceramics, or their combinations/composites for nanofiber production at a mass scale. Fiber-shaped nanostructures with a tunable porosity, high specific surface area, and a flexibility of functionalization with biological molecules are its advantages. These spun fibers have wide applications in industry and biomedical areas, such as energy, catalysis, water treatment, aerospace, batteries, sensors, and electronic devices, filtration, composites, wound dressing, tissue engineering scaffolds, and drug delivery. This Special Issue aims to enclose the most innovative advancements in the field of electrospinning of materials and fabrication processes. Furthermore, this may serve as a potent platform for knowledge sharing on the advancements in novel technologies and applications.

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Guest Editor





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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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