



Synthesis, Structures, and Applications of Electrospun Nanofibers

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Recently, electrospun nanofibers have been used in a wide range of applications because of their large surface area to volume ratio and the unique nanometer scale architecture built by them. Nanofibers fabricated by electrospinning represent a new class of promising scaffolds to support tissue regeneration such as skin, ligament, and tendon, as well as vascular, muscle, and neural tissue. Moreover, electrospun nanofibers have been used in water filtration, catalyst, enzyme carriers, sensors, energy conversion, and storage. I invite authors to contribute original research articles or review articles covering the most recent progress and new developments in the design and utilization of electrospun nanofibers for novel devices and fundamental studies relevant to applications in energy, sensing, biomedical, and environmental engineering. This Special Issue aims to cover a broad range of subjects, from electrospun nanofiber synthesis to the design and characterization of their devices and technologies for a number of applications. The format of welcomed articles includes full papers, communications, and reviews.

Dr. Katayoon Kalantari

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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