Special Issue

Emerging Functions of Nano-Organized Polysaccharides

Message from the Guest Editor

Natural polysaccharides, such as cellulose, chitin, and starch, possess hierarchical nanoarchitectures, e.g., crystalline, nanofibrous, needle-like, helical, folded, and chain-aligned structures. Research and development of natural polysaccharides can be classified into two categories: (1) greener alternatives to existing products, from ecological and sustainability viewpoints; and (2) emerging functional nanomaterials, from scientific encounters with the unknown.

In this Special Issue, I would like to focus on the second topic, which includes the unexpected new functions arising from the inherent nanoarchitectures of natural nano-organized polysaccharides. We welcome original research papers, communications, and short reviews. Potential topics include, but are not limited to:

- crystalline-structure-triggered novel functions of nano-organized polysaccharides;
- nanomorphology-triggered novel functions of nano-organized polysaccharides;
- nanointerface-triggered novel functions of nano-organized polysaccharides;
- nanocomposite-triggered novel functions of nano-organized polysaccharides.

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.

Editor-in-Chief

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