Special Issue

Frontier in DNA Nanotechnology and Nanopore

Message from the Guest Editor

Nanopores have been widely applied in the detection of biomaterials from single DNA molecules to virus. Materials to compose nanopores for sensing are roughly categorized into biological and sold state. As a commercialized sequencing system made of bio nanopores came out, biological nanopore technology reached a milestone in DNA sequencing. In contrast, sold state nanopores have been applied to detect various single molecules with their structures, discriminating virus types and so on. This Special Issue will focus on such varieties of solid state nanopore application and technologies, including the choice of materials and surface functionalization, as well as detection methods. Numerical simulations for the detection of biomolecules and virus will also be welcome.

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 nanometerscale 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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