

Special Issue

Bio-Inspired Functional Nanomaterials

Message from the Guest Editor

The design and processing of innovative nanoscale bio-inspired materials is of great interest for applications in nanotechnology that include medicine, sensors, microfluidics, catalysis, pharmaceuticals, and “green energy” by photovoltaics. Therefore, novel materials with specific functionalities can be designed, using the same building blocks that nature uses, combined with nanotechnology—that is, the possibility to control and manipulate matter on nanometric length scales. This issue focuses on the fundamentals of bio-inspired multifunctional nanostructured materials, which can be used to obtain green, affordable, and environmentally sustainable multifunctional 2D and 3D micro- and nanotextured interfaces. These sustainable materials can find applications in the electronics, sensing, tissue engineering, drug delivery, smart materials, photocatalytic, and bioengineering areas. We invite researchers to contribute original research papers as well as review and perspective articles that draw inspiration from nature in developing materials with unique properties, such as miniaturization, hierarchical organization, and adaptability.

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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Editor-in-Chief

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