



Emergent Applications of Peptide and Protein Nanotechnology

Guest Editor:

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Message from the Guest Editor

Peptides and proteins are fundamental components of the cellular machinery. With the idea of mimicking the functional properties of these versatile biological engines, the last decade has witnessed an explosion of interest in nanotechnological applications of peptides and proteins as smart biomaterials.

This Special Issue is open to contributions on: (a) biomedical applications of peptide and protein nanostructures for therapy, prevention, and diagnostics; (b) peptides and proteins as functional components of nanostructured materials (nanotubes, nanoparticles, ultrathin films, nanofibers); (c) the rational design, properties, and applications of peptide- and protein-based materials; (d) peptide and protein hybrid materials; (e) peptide and protein networks, interfaces, and supramolecular complexes; and (f) computational approaches to the design of peptide and protein nanostructures. Our contributors are leading scientists from the bionanoworld, i.e., nanomedicine, biomaterials science, bionanoengineering, and bionanotechnology.





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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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