



Immobilization of Organic and Inorganic Nanoparticles and Enzymes

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Message from the Guest Editor

Dear Colleagues,

Nanomaterials with controllable chemical compositions and structures, large surface-to-volume ratios, various surface properties, and functionalities offer many opportunities for regulating the biological function of incorporated protein with interesting potential applications in catalysis, drug delivery, and biosensors. By far, immobilization of enzymes onto organic or inorganic nanomaterials and chemical conjugation of protein with polymers represent commonly used methods to prepare protein-incorporated hybrid bionanomaterials. However, the design and synthesis of such hybrid bionanomaterials remains a challenge in terms of tailoring the structures of the bionanomaterials in response to their applications. The scope of this Special Issue on immobilization of nanoparticles and enzymes is not to focus only on biomedical applications that usually encompass the majority of the research in this field but also in the new advanced applications in all sectors, including materials, food, agriculture, energy, and the environment.

Dr. Andrea Zille
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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