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## Synthesis and Functionalization of Colloidal Nanoparticles

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### Message from the Guest Editors

Colloidal nanoparticles are transforming many research fields, from energy conversion to biomedicine. The size/shape- and composition-dependent physicochemical properties of inorganic materials and their large surface area, which regulates interaction at the interface, highlight the strong relationship between structure and property (hence function) at the nanoscale and push towards a selective design of the materials. In this regard, this Special Issue aims at highlighting diverse aspects of materials at the nanoscale, spanning from the synthesis of different classes of colloidal nanoparticles to their surface engineering, towards properly designed nanostructures with tailored functional properties and, consequently, as active components that can be useful for applications in the field of energy conversion, catalysis, sensing, and biomedicine. We want to encourage scientists of diverse backgrounds (material science, inorganic chemistry, biochemistry, biology) to contribute cutting-edge research papers, communications, and review articles to this Special Issue of Nanomaterials.



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# Special Issue



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## Editor-in-Chief

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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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