



Properties and Potential Applications of Nanoparticles

Guest Editor:

Prof. Dr. Yap Wing Fen

1. Department of Physics, Faculty of Science, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia
2. Functional Nanotechnology Devices Laboratory, Institute of Nanoscience and Nanotechnology (ION2), Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

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Message from the Guest Editor

Nanoparticles are part of a wide class of materials that range in size from 1 to 100 nm. They can be classified into different classes based on their properties, shape, or size. The most common nanoparticles are metal nanoparticles, ceramic nanoparticle, polymeric nanoparticles, and carbon-based nanoparticles. Nanoparticles possess unique physical and optical properties due to their nanoscale size as well as high surface area. Due to these special characteristics, nanoparticles are suitable candidates for various applications, including sensing, catalysis, energy, medical, and environmental applications.

This Special Issue will cover various topics, ranging from synthesis and characterization to the potential application of various types of nanoparticles. This Special Issue will cover all of the properties (physical, structural, chemical, optical, or electrical) as well as potential applications in various field.

This Special Issue is open to original research articles as well as review papers that will help researchers worldwide understand the latest trends and progress in the field of nanoparticles.





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Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science,
University of Birmingham,
Birmingham B15 2TT, UK

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.

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Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
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