Special Issue

Advanced Radiation Technology for Nanomaterials: Fabrication, Effects and Applications

Message from the Guest Editor

Nanomaterials are ubiquitous (cosmetics, foods, industry, energy conversion, therapies, etc.). The potential toxicity and beneficial effects on living bodies of these nanomaterials, as well as new ways to produce and utilize them, have been the subject of extensive research for 20 years. The fabrication of various types of nanomaterials from energetic radiation and lasers is well known. We are now seeing a synergy of recent advances in the technology of these sources and new needs in medical cancer therapy and other applications. These advances merit being addressed in a dedicated journal issue. The selected authors in this issue have recently produced outstanding basic research on new methods of fabrication and elucidated effects on the nanoparticle surface, including grafting onto nanoparticles, to help vectorization and to explain and rank nanoparticles in order to enhance their ability to target and damage tumor cells.

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.

Editor-in-Chief

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