

Special Issue

Novel Nanotechnology-Based Methods in Cancer Diagnosis and Treatment

Message from the Guest Editor

Throughout the world, cancer is one of the leading causes of death and morbidity. Nanotechnology-based diagnostic methods are being developed as promising tools for real-time, convenient and cost-effective cancer diagnosis and detection. Furthermore, the advent of nanotechnology has revolutionized the area of cancer treatment.

This Special Issue aims to cover recent progress in both diagnostic and therapeutic cancer strategies based on nanotechnology. The format of welcomed articles includes full papers, communications and reviews. Potential topics include, but are not limited to, the following: Nanotechnology in cancer diagnosis: tumor imaging, biomarker screening methods based on nanoparticles, the detection of extracellular cancer biomarkers and the detection of cancer cells; Nanotechnology in cancer therapy: targeted drug delivery, immunotherapy, cryosurgery, photothermal therapy (PTT) and photodynamic therapy (PDT); radiotherapy; Advantages and disadvantages of nanotechnology in cancer diagnosis and therapy; Challenges in the clinical application of nanotechnology for cancer diagnosis and therapy.

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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