Special Issue

Recent Advances in Nanoscale Detection for Biomedical Imaging and Analysis

Message from the Guest Editors

This Special Issue of *Nanomaterials*, titled 'Recent Advances in Nanoscale Detection for Biomedical Imaging and Analysis', aims to showcase cutting-edge research emphasizing the vital role of nanomaterials in biomedical contexts. We seek to highlight innovative applications and developments in small molecules exhibiting unique physiological accessibility, nanostructured surfaces and particles that extend detection limits, advanced image processing algorithms that enhance spatial resolution, and nanoscale devices that possess unique operational characteristics. Whether pushing the limits of ultrafast laser pulses, lowering the molecular detection limit, developing novel contrast agents, or enhancing molecular specificity, we cordially invite submissions of original research articles, comprehensive reviews, and perspectives that illustrate the transformative power and versatility afforded by nanoscale technologies in biomedical imaging and analysis. We look forward to receiving your outstanding contributions and pushing the boundaries of biomedical imaging and analysis through nanotechnology together.

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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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