Special Issue

NANO versus BIO: Nanophysical Bactericidal Methods in Microbiology and Their Prospective Applications

Message from the Guest Editors

Pathogenic bacteria and viruses appear to build into our environment, making our resistance to their expansion and occupation a crucial “to be or not to be” question (life or death). Fortunately, to date, we are able to put our smart biotechnological achievements against the blind probabilistic play of bacterial reproduction, permanently overcoming our control via genetically acquired resistance. This way, advances and breakthroughs in the invention of novel bactericidal nanomaterials, biophotonic procedures, or their combined action keep a favorable balance in the everlasting struggle. This Special issue is focused on delivering a state-of-art collection of review and featured research papers on advanced nanophysical and biophotonic modalities in their synergistic counterfeiting antibiotic-resistant pathogenic bacteria, self-organized into biofilms on critical surfaces in biomedicine, cosmetology, the food industry, etc.

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Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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