Special Issue

Antibacterial Applications of Novel Nanoscale Biocompounds

Message from the Guest Editors

Antibacterial nanoparticles are safe when used at specified levels, according to many studies, but their effects on beneficial microorganisms—such as humans, animals, and soil microbiota-are a source of worry. At this point, it is important to highlight that nanoscale compounds can be synthesized through biological, physical, and chemical methods. In general, the synthesis of nano-based materials using organisms such as plants, bacteria, fungi, yeasts, and algae is less expensive and safer since it uses eco-friendly, non-toxic materials. Moreover, biogenic nanoformulations are much more stable than those produced by non-green methods due to the natural coating or organic materials on the surface, which prevent agglomeration and uncontrolled growth. Thus, compiling contemporary research and viewpoints on bio-inspired antimicrobial nanomaterials is the goal of this Special Issue. We seek original research papers, reviews, short reviews, and perspective works that present novel insights or points of view about the use of nanoscale substances in microbiology.

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