Special Issue

Nanoparticles as Novel Solutions to Microbial Resistance in Hospital Care

Message from the Guest Editor

Nosocomial infections, or healthcare-associated infections, are acquired during medical care and are often caused by multidrug-resistant microorganisms like methicillin-resistant and vancomycin-resistant Staphylococcus aureus, vancomycin-resistant Enterococcus, carbapenem-resistant Enterobacteriaceae and Acinetobacter, and multidrug-resistant Pseudomonas aeruginosa. These pathogens significantly increase patient mortality.

Metal nanoparticles, particularly silver nanoparticles, show great promise in combating these infections. Silver nanoparticles not only inhibit the growth of resistant microorganisms but also possess unique properties such as high biocompatibility and ease of use in medical applications.

This Special Issue seeks manuscripts exploring the use of metallic nanoparticles to prevent nosocomial infections and advancing our understanding of their mechanisms in inhibiting multidrug-resistant pathogens.

Guest Editor

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Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery. use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. Antibiotics is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Editor-in-Chief

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