



## Antimicrobial Properties of Nanoparticle

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### Message from the Guest Editors

The scientific explorations of nanoparticles for their inherent therapeutic potencies as antimicrobial and antiviral agents also due to increasing incidences of antibiotic resistance have gained more attention in recent time. Several investigations have demonstrated the potential of nanoparticles in the treatment of various microbial infections. The therapeutic applications of nanoparticles as either delivery agents or broad spectrum inhibitory agents against viral and microbial infections are ready to be fully exploited.

The broad spectrum antimicrobial activity of nanoparticles is exerted through multifaceted mechanisms. The adhesion of nanoparticles to microbial cells, production of reactive oxygen species, and their penetration inside the cells, have been recognized as the most prominent modes of antimicrobial action.

The present Special Issue focuses on the antibacterial, antiviral, antifungal, and antiparasitic potential of nanoparticles and the analysis of their mechanisms of action. The emerging efforts to address current challenges and solutions for the production of nanoparticles and the treatment of infectious diseases will also be considered.





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## Message from the Editor-in-Chief

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