Special Issue

Advances in the Application of Nanoparticles in Antimicrobial Research

Message from the Guest Editors

The editorial board of Molecules (IF: 4.2, ISSN 1420-3049) invites you to submit an article or review to a Special Issue entitled "Advances in the Application of Nanoparticles in Antimicrobial Research". Nanoparticles have shown promising advancements in antimicrobial research due to their unique properties and potential applications. These particles exhibit unique properties that enable them to effectively target and eradicate various types of pathogens, including bacteria, viruses, and fungi through mechanisms such as disrupting cell membranes, inhibiting biofilm formation, and enhancing drug delivery. Researchers are exploring innovative ways to utilize nanoparticles in antimicrobial coatings, medical devices, and drug delivery systems to enhance their efficacy against resistant microorganisms. The application of nanoparticles in antimicrobial research represents a growing field with significant potential to address the growing threat of antimicrobial resistance on One Health and chemistry frameworks with a collaborative, transdisciplinary, and multisectoral approach that promotes close cooperation across human health, animal health, agronomy, and the environment.

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Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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