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Nanoparticles: New Antimicrobial Agents

Guest Editor:

Prof. Dr. Silvana Alfei

Department of Pharmacy, University of Genoa, Viale Cembrano, 16148 Genoa, Italy

Deadline for manuscript submissions: closed (30 September 2023) Dear Colleagues,

Message from the Guest Editor

Both Gram-negative, Gram-positive pathogens and fungi are evolving as clinically relevant superbugs, due the incessant emergence of resistance to the most part of available antibiotics. Polymer and copolymer nanoparticles are regarded as a promising strategy to achieve multifunctional materials, hybrid nanoparticles or nanocomposites possessing remarkable antimicrobial activities. Also, multifunctional nanoparticles, including dendrimers, polymers and copolymers offer the possibility to be further functionalized by linking target molecules or antibodies to improve their therapeutic efficacy, direct their effects and reduce their possible toxicity.

This Special Issue aims to provide a platform for molecular mechanistic research on new antimicrobial agents with a special focus on cationic antimicrobial materials and structural strategies. Furthermore, studies of formulations of the developed agents, characterized by antibacterial activity and low cytotoxicity toward mammalian cells, are welcome.



mdpi.com/si/134047







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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Message from the Editor-in-Chief

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International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS_MDPI