



Antimicrobial and Anti-biofilm Activity of Metal and Metal Oxide Nanoparticles

Guest Editors:

Dr. Ana Olívia De Souza

Development and Innovation
Laboratory, Instituto Butantan,
Sao Paulo 05503-900, SP, Brazil

Dr. Gabriel Padilla

Department of Microbiology,
Biomedical Sciences Institute,
University of São Paulo, São
Paulo 05508-900, SP, Brazil

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Message from the Guest Editors

Dear Colleagues,

The microbial infections caused by several pathogens and the emergence of cases of resistance to available antimicrobials are constantly increasing, mainly due to gene transfer and/or mutation. In this aspect, microbial biofilms are an additional problem. Despite continuous efforts, the discovery of new antimicrobial compounds has not been able to keep up with demand. In addition to the development of new compounds, new strategies and technologies are very important to offer new possibilities of treatment for microbial infections and biofilms.

Among the nanotechnological approaches for nanomaterials applications, different metal and metal oxide nanoparticles have been obtained, and studies regarding their application as antimicrobial or anti-biofilm agents have been performed.

In this regard, this Special Issue is focused on manuscripts describing the development of potential metal and metal oxide nanoparticles as antimicrobial and anti-biofilm agents, mainly those obtained by biological processes, including a discussion of the protein corona formation, characterization, and biocompatibility.





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Editor-in-Chief

Prof. Dr. Nicholas Dixon

School of Chemistry and
Molecular Bioscience, University
of Wollongong, Wollongong, NSW
2522, Australia

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.

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Antibiotics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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