

Special Issue

Development and Biomedical Application of Antibacterial Coatings

Message from the Guest Editor

Human health burdens caused by various microbial communities are one of the most important global challenges in daily life. To prevent suffering from bacterial resistance, increasing attention has been paid to protective antibacterial coatings on the surface. Therefore, the purpose of this Special Issue is to explore the most recent progress in advanced functional antibacterial coatings to protect bactericidal effects for both Gram-positive and Gram-negative bacteria with cell compatibility. AMPs, antibiotics, nanoparticles, and biocompatible polymeric-type coatings on substrates could enhance surface properties and structural design and lead to promising antibacterial activities. Papers on all the potential applications in cell compatibility, cell proliferation, reactive oxygen species, membrane damage, structural deformation, etc., as well as the cell/bacterial structure–property relationships are welcome in this issue. Review papers and original research articles related to biocompatible coatings for antibacterial activities or biomedical applications are also welcome.

Guest Editor

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Deadline for manuscript submissions

closed (15 January 2025)



Antibiotics

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed



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About the Journal

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 disciplines 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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