

Special Issue

Antimicrobial Drug Design and Discovery

Message from the Guest Editors

The discovery and development of new antimicrobial drugs are critical due to the alarming rise in antimicrobial resistance (AMR), which undermines the effectiveness of existing treatments for infections caused by bacteria, fungi, viruses, and parasites. This Special Issue focuses on the innovative strategies, methodologies, and technologies driving the discovery and design of new antimicrobial agents. It aims to highlight advances in combating antimicrobial resistance through novel drug targets, structure-based design, natural product optimization, and synthetic approaches. This Special Issue welcomes contributions on computational drug design, high-throughput screening, pharmacokinetics, and pharmacodynamics studies, as well as interdisciplinary approaches integrating microbiology, chemistry, and molecular biology. Research on emerging antimicrobial compounds, alternative therapies (e.g., peptides, bacteriophages), and mechanisms of action is particularly welcome to address the global need for effective treatments against resistant pathogens.

Guest Editors

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Deadline for manuscript submissions

closed (20 September 2025)



Applied Sciences

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Impact Factor 2.5
CiteScore 5.5



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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