Special Issue

Antimicrobial Research: In Silico Strategies for Drug Discovery Against Microbial Infections

Message from the Guest Editor

This special issue focuses on the key role of in silico approaches in the fight against microbial infections. We welcome high-impact contributions that explore computational methods such as AI/machine learning, QSAR, complex network analysis, classical ligand- and structure-based drug discovery, de novo design, etc. Submissions may cover a wide range of targets (from proteins to bacterial, fungal, viral, and parasitic strains) and include both novel and well-established computational techniques. This Special Issue welcomes review articles, original research contributions, and perspectives where in silico strategies play a central role in antimicrobial drug discovery, including (but not limited to) lead identification, prediction of antimicrobial activity/efficacy, integration of multi-omics data, and many other topics.

Guest Editor

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Deadline for manuscript submissions

31 December 2025

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/243370

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

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