Special Issue

Advances in Antimicrobial Peptides

Message from the Guest Editor

This Special Issue aims to showcase cutting-edge research on antimicrobial peptides (AMPs). We welcome original research articles, reviews, and perspectives on the following topics:

- Mechanisms of Action: Molecular insights into AMPs' antimicrobial activities, including interactions with microbial membranes and intracellular targets.
- Novel AMP Discovery: Identification and characterization of new AMPs from natural sources (plants, animals, microorganisms).
- Design and Engineering: Optimization and synthetic production of AMPs to improve stability, specificity, and potency.
- Therapeutic Applications: AMPs as treatments for infections, including drug-resistant pathogens and biofilm-related infections.
- Immunomodulation: AMPs' role in regulating immune responses and host defense mechanisms.
- Clinical Trials and Applications: Updates on AMPs in clinical trials and their uses in medicine, agriculture, and food safety.
- AMPs and Nanotechnology: Combining AMPs with nanotechnology for advanced antimicrobial materials and drug delivery systems.

Guest Editor

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Deadline for manuscript submissions

31 August 2025

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/218087

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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.

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Rapid Publication:

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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