Special Issue

Bacterial Virulence and Biosurfactants

Message from the Guest Editor

Biosurfactants have great potential for use in combatting bacterial virulence, especially in the context of the growing resistance to antibiotics. Considering this, it is necessary to research new biosurfactants as antimicrobial agents: their synergistic actions with conventional antibiotics increase the effectiveness of treatments, reducing doses and side effects. This represents an important strategy to combat bacterial resistance and develop new, safer, more effective treatments against microbial infections. The new generation of antimicrobials could represent an important tool in the fight against this global threat to public health. In this collection of topics, we aim to identify new strategies that can be used to overcome bacterial resistance, with a particular focus on the discovery or development of new biosurfactants with promising antimicrobial properties. Topics of interest include, but are not limited to, the following:

Biosurfactants; Bio-inputs; Biopolymers; Biodegradable and green polymers.

Guest Editor

Dr. Juliana Luna

School of Health and Life Sciences, Catholic University of Pernambuco (UNICAP), Rua do Príncipe, n. 526, Boa Vista, Recife 50050-900, Brasil

Deadline for manuscript submissions

30 November 2025



Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2 CiteScore 7.7 Indexed in PubMed



mdpi.com/si/203864

Microorganisms Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 microorganisms@mdpi.com

mdpi.com/journal/ microorganisms





Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2 CiteScore 7.7 Indexed in PubMed



microorganisms



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

Dr. Nico Jehmlich Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

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).