

Special Issue

Cyanobacterial Predatory: Underexplored Diversity and Future Challenges

Message from the Guest Editor

While the majority of cyanobacterial research focuses on the environmental factors that control the bloom-forming species, toxin production, toxicity to livestock, etc., few studies focus on the diversity of predatory feeding on “prey cyanobacteria”, and how grazers or phages can influence the duration or even prevent the onset of blooms in aquatic systems. Although bacteriophages and metazooplankton grazers have garnered interest in recent decades, reports on other groups such as mixotrophic algae, protists and invertebrates are still scarce, despite their major contribution to ecosystem functioning. To date, no predatory archaeans are known, while a few bacterial species are well characterized as effective predators (belonging to only three phyla). This Special Issue is open, but not limited, to recent advances relating to new predator species, from bacteriophages to invertebrates that prey on cyanobacteria, and the underlying mechanisms of cyanobacterial cell lysis or toxin degradation/reduction. Short communications, critical reviews or challenging questions in the field are also particularly welcome.

Guest Editor

Dr. Katia Comte

Centre National de la Recherche Scientifique (CNRS)/Museum National d'Histoire Naturelle (MNHN), Molécules de Communication et Adaptation des Micro-Organismes, 75005 Paris, France

Deadline for manuscript submissions

closed (31 March 2025)



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/198900

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

[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)





Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/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).