Special Issue

Microbial Communities and Nitrogen Cycling

Message from the Guest Editors

The nitrogen cycle is a fundamental biogeochemical process that underpins life on Earth, involving the transformation of nitrogen between its various chemical forms. Microbial communities play a pivotal role in this cycle, mediating processes such as nitrogen fixation. nitrification, denitrification, and ammonification. This Special Issue aims to explore the intricate relationships between microbial communities and nitrogen cycling, highlighting recent research findings, technological advancements, and theoretical insights. We welcome submissions that examine the diversity, function, and resilience of microbial populations in various ecosystems, as well as studies that investigate the impact of environmental changes on nitrogen cycling processes. By bringing together interdisciplinary research, this issue seeks to foster a deeper understanding of the complex dynamics within microbial nitrogen transformations and their implications for ecosystem health and global biogeochemical cycles.

Guest Editors

Prof. Dr. Chen Ye

Dr. Yu Gong

Dr. Hao Liao

Deadline for manuscript submissions

31 May 2026



Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/208050

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



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).

