

Special Issue

Molecular Mechanism of Microbial Heat Adaptation

Message from the Guest Editor

Temperature is one of the most important factors for the survival of all living organisms. Microbes need sensing and defense mechanisms to adapt to changes in temperature. They adapt to high temperatures through a series of biological processes at the cellular and molecular levels. This Special Issue, "Molecular Mechanism of Microbial Heat Adaptation", focuses on the molecular mechanisms of microbial heat adaptation, including the changes in nucleic acid structure and regulatory relationship, gene recombination, DNA damage repair, protein structural stability and metabolic adaptation to a high-temperature environment. We welcome researchers who conduct research related to the molecular mechanisms of microbial thermal adaptation to submit research papers or review articles to this Special Issue.

Guest Editor

Prof. Dr. Binguang Ma

Hubei Key Laboratory of Agricultural Bioinformatics, College of Informatics, Huazhong Agricultural University, Wuhan 430070, China

Deadline for manuscript submissions

closed (31 October 2025)



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/197448

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 20 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).