

# Special Issue

## Soil Microbial Carbon/Nitrogen/Phosphorus Cycling

### Message from the Guest Editors

The role of soil microorganisms in organic matter turnover, nitrogen cycling, phosphorus transformations, and metal sequestration in natural and agricultural ecosystems is crucial for sustainable ecosystem management. This Special Issue aims to explore the functions of soil microorganisms in nutrient cycling and how they enhance the multifunctionality of ecosystems, providing fundamental and practical guidance for sustainable soil management. The potential topics include the following:

- Microbial involvement in soil nutrient cycling.
- The diversity, community structure, and characteristics of key functional soil microorganisms and microbial food webs.
- Applications of soil microorganisms in vegetation restoration and agricultural production.
- The effects of global warming, nitrogen deposition, and agricultural management practices on soil microbial communities.
- Soil microorganisms in environmental remediation and soil erosion control. This Special Issue is open to fundamental, applied, and field research and review manuscripts on all aspects of these topics.

### Guest Editors

Dr. Dan Xiao

Institute of Subtropical Agriculture, Chinese Academy of Sciences,  
Changsha 410125, China

Dr. Yinhang Xia

College of Resources, Hunan Agricultural University, Changsha 410128,  
China

### Deadline for manuscript submissions

closed (15 April 2025)



## Microorganisms

an Open Access Journal  
by MDPI

Impact Factor 4.2  
CiteScore 7.7  
Indexed in PubMed



[mdpi.com/si/201604](https://mdpi.com/si/201604)

*Microorganisms*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[microorganisms@mdpi.com](mailto: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).