microorganisms

IMPACT FACTOR 4.2 | Indexed in: PubMed | CITESCORE 7.7

an Open Access Journal by MDPI

Microbial Metabolic Engineering Technology

Guest Editor:

Prof. Dr. Kesen Ma
Department of Biology, University of Waterloo, Waterloo, ON N2L 3G1, Canada

Deadline for manuscript submissions:
closed (30 September 2025)

Message from the Guest Editor

Microbial metabolic engineering technology is at the forefront of biotechnological innovation, revolutionizing the production of valuable compounds through the manipulation of metabolic pathways in microorganisms. This cutting-edge research focuses on optimizing microbial cell factories to efficiently synthesize biofuels, pharmaceuticals, chemicals, and other high-value products. By employing genetic engineering techniques, such as gene knockout, overexpression, and pathway optimization, researchers aim to enhance metabolic flux towards desired products while minimizing byproduct formation. Advancements in synthetic biology, systems biology, and computational tools have enabled precise control and fine-tuning of microbial metabolism, leading to improved yields, reduced production costs, and sustainable bioprocesses.

The Special Issue will collect papers on the following research topics:

- Multi-Omics Integration
- Synthetic Biology Tools
- Host-Pathogen Interactions
- Microbiome Engineering
- Metabolic Network Modeling
- Enzyme Engineering

microoorganisms

IMPACT FACTOR 4.2 | Indexed in: PubMed | CITESCORE 7.7

an Open Access Journal by MDPI

Editor-in-Chief

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
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))

Contact Us

Microorganisms Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/microorganisms
microorganisms@mdpi.com
𝕏@Micro_MDPI