

Special Issue

Combating Antimicrobial Resistance at the Interface of Food, the Environment and Innovative Materials

Message from the Guest Editor

This Special Issue, “**Combating Antimicrobial Resistance at the Interface of Food, the Environment and Innovative Materials**”, seeks to foster interdisciplinary research addressing AMR through a dual lens of surveillance and intervention. We welcome contributions that investigate the occurrence, spread and molecular characterization of resistant organisms such as *Enterococci*, *Staphylococcus* and *Escherichia coli* in food and water and on environmental surfaces, as well as studies that explore their implications within a One Health framework. Equally, this Special Issue emphasizes innovative solutions—such as active surface coatings, packaging systems and edible films infused with bacteriocins, beneficial microbes or natural antimicrobials (e.g., essential oils, plant extracts, probiotics)—aimed at limiting the spread of resistance and disrupting biofilms of multidrug-resistant strains. Additional areas of focus include the interactions between materials, environmental conditions and resistance selection; the role of novel food-treatment technologies; and integrated One Health models linking food, the environment and clinical settings.

Guest Editor

Dr. Immacolata Anacarso

Department of Life Science, University of Modena and Reggio Emilia, Modena, Italy

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/263246

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, CAPus / 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).