Special Issue

Microbial Quorum Sensing: Advances and Challenges

Message from the Guest Editor

Quorum Sensing (QS), a cell-cell communication mechanism population density-dependent, regulates genes expression which is reflected in behavioral responses by microbial communities. QS relies on production, release and detection of extracellular molecules (autoinducers). Over the past half-century, there has been a remarkable increase of studies and knowledge of QS mechanism, chemistry of signal molecules, involved genes and resultant behavioral responses. All these studies have resulted in a best understanding of chemical communication between microbes in term of “sociality”, that means a coordinated interaction within species, between species and hosts (inter-kingdom communication). The purpose of this special issue is to report recent findings and advances in this topic covering different fields (medicine, food, ecology, marine habitat) and to discuss of how QS could be a big challenge to be further investigated and better understand.

Guest Editor

Prof. Dr. Giuseppina Tommonaro
Institute of Biomolecular Chemistry, Italian National Research Council, Pozzuoli, NA, Italy

Deadline for manuscript submissions

closed (30 April 2023)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/104626

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

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).

MDPI