

Special Issue

Trace Metal Element Metabolism in Biological Systems

Message from the Guest Editors

Metals are essential for life because they are required in a multitude of biological processes. Enhanced understanding of the molecular mechanisms underlying metals metabolism is crucial not only for the discovery of novel targets able to modulate these processes, but also the development of effective therapeutic strategies or compounds, to ultimately ameliorate or prevent the associated diseases. However, the cellular and molecular mechanisms of metals contributing to these disorders are largely unclear at present. This Special Issue aims to highlight recent advances in the molecular mechanisms underlying the physiology and pathophysiology of metal homeostasis, especially for metal roles in keeping regular biological metabolism pathways, and their dys-homeostasis-induced disordered metabolism pathway. The content will include molecular mechanisms of metal homeostasis, the contacts between them and the relationship between metals and diseases, multi-biological interactions, and it will bring together different disciplines of metals to uncover their internal laws in but not limited to human neurodegenerative diseases, cancers, plant disease, and epidemic disease.

Guest Editors

Prof. Dr. Minglin Lang

College of Life Science, University of Chinese Academy of Sciences,
Beijing 100049, China

Prof. Dr. Guiran Xiao

School of Food Science and Engineering, Hefei University of
Technology, Hefei 230009, China

Deadline for manuscript submissions

closed (31 August 2024)



Metabolites

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 8.1
Indexed in PubMed



mdpi.com/si/144477

Metabolites
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metabolites@mdpi.com

[mdpi.com/journal/
metabolites](https://mdpi.com/journal/metabolites)





Metabolites

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 8.1
Indexed in PubMed



[mdpi.com/journal/
metabolites](https://mdpi.com/journal/metabolites)



About the Journal

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Editor-in-Chief

Dr. Amedeo Lonardo
Internal Medicine, Ospedale Civile di Baggiovara, Azienda Ospedaliero-
Universitaria, 41126 Modena, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Endocrinology, Diabetes and Metabolism)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.7 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the second half of 2025).