

## Topical Collection

# State-of-the-Art Molecular Microbiology in China

### Message from the Collection Editors

This Topical Collection aims to provide a comprehensive overview of recent advances in molecular microbiology in China by inviting contributions from Chinese research institutes/laboratories that consolidate our understanding of this area. Topics include, but are not limited to, the following:

- Antibiotic resistance mechanisms;
- Biosynthesis of macromolecules;
- Cell division and cell wall structure;
- Gene expression and its regulation;
- Gene transfer mechanisms;
- Host–pathogen interactions, including host responses;
- Induction of cell death by microorganisms;
- Membrane biogenesis and function;
- Pathogenicity mechanisms;
- Post-translational modifications;
- Protein delivery (secretion and trafficking);
- Signaling pathways and networks;
- Systems biology;
- Vaccines;
- Virulence factors;
- Antimicrobial peptides;
- Therapeutic strategies;
- Nutrients metabolism;
- Genomics and metagenomics;
- Interaction of microbes with host;
- Protein structure and function;
- Probiotics;
- Communication of microbes;
- Synthetic biology;
- Animal and human gut health.

---

### Collection Editors

Dr. Shengguo Zhao

State Key Laboratory of Animal Nutrition, Institute of Animal Sciences, Chinese Academy of Agricultural Sciences, No. 2 Yuanmingyuan West Road, Beijing 100193, China

Dr. Zeng-yan Zhang

The National Key Facility for Crop Gene Resources and Genetic Improvement, Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, Beijing 100081, China

---



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed



[mdpi.com/si/113904](https://mdpi.com/si/113904)

*International Journal of  
Molecular Sciences*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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

[ijms](https://www.mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed



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

[ijms](https://ijms)



## About the Journal

### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

---

### 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore  
- Q1 (Inorganic Chemistry)