

Special Issue

Molecular Mechanisms of Abiotic Stress Response in Rice

Message from the Guest Editors

Dear colleagues, Plant perception and response to abiotic stress is a complex process, involving multiple genes, multiple signal transduction pathways and multiple gene expression products. The factors that play a role mainly include the ROS scavenging enzyme system, protein kinase, membrane transporter, ABA, transcription factor, miRNA and so on. This Special Issue focuses on the important factors affecting rice yield trait–nutrient utilization and stress adaptation, and analyzes the physiological and biochemical processes of rice nutrient quality metabolism, nutrient efficient utilization, abiotic stress response and the molecular mechanism of related regulatory genes, especially interested, but not limited to, the following topics: (1) Analysis of the physiological and molecular mechanisms of environmental factors affecting rice growth, yield and quality; (2) Transgenic regulation of important gene resources; (3) Deeply exploring the biological functions of core genes involved in multiple signaling pathways.

Guest Editors

Dr. Guang Chen

Institute of Quality Standard and Monitoring Technology for Agro-Products of Guangdong Academy of Agricultural Sciences, Guangzhou 510640, China

Dr. Li Zhu

State Key Laboratory of Rice Biology, China National Rice Research Institute, Hangzhou 310006, China

Deadline for manuscript submissions

closed (15 September 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/182359

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

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





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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