Special Issue

Plant Stress-Induced Responses and Tolerance Mechanisms at Biochemical, Cellular, Physiological and Molecular Levels

Message from the Guest Editors

Plants are constantly facing adverse environmental conditions, including biotic stress conditions from deleterious microorganisms (fungi, bacteria, viruses, viroids, phytoplasma, and nematodes) and abiotic stresses such as low and high temperature, salinity, drought, flood, heavy metal toxicity and oxidative stress. These biotic and abiotic factors impact plant growth, reproduction, vield and survival. These stresses are the major causes of plant loss worldwide. To overcome these stresses, plants respond simultaneously through several tolerance mechanisms to counter the disturbances and retain health and protection. Further, the tolerance mechanisms and responses to these stresses develop at multiple levels, including cellular, tissue, morphological, physiological, anatomical and molecular levels. This Research issue encourages leading plant scientists to submit their studies on advancing our understanding about fundamental processes, stress signaling, and adaptation mechanisms that develop in plants in response to various biotic and abiotic stresses.

Guest Editors

Dr. Iftikhar Ali

State Key Laboratory of Molecular Developmental Biology, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, Beijing 100101, China

Prof. Dr. Byoung Ryong Jeong

Department of Horticulture, Division of Applied Life Science, Graduate School, Gyeongsang National University (GNU), Jinju 52828, Republic of Korea

Deadline for manuscript submissions

closed (28 March 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/136901

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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)

