Special Issue

UV-B Signaling and Its Molecular Control in Plant

Message from the Guest Editor

UV-B radiation can act both as an environmental stress factor and as an informational signal, and has been shown to regulate plant development and photomorphogenesis. The type of response to UV-B is determined substantially by the fluence rate of exposure. High fluence rates of UV-B produce reactive oxygen species and may cause damage to DNA, proteins, membranes, and lipids. At low fluence rates, UV-B is capable of promoting metabolic and developmental changes, such as biosynthesis of phenolic secondary metabolites and inhibition of hypocotyl elongation. It has been demonstrated that low fluence rates of UV-B stimulate expression of a range of genes that help protect plants against UV damage.

This Special Issue is aimed at providing selected contributions on advances in UV-B signaling and its molecular control in plants. Potential topics include, but are not limited to:UV-B perception and signaling by the UVR8 photoreceptor.

- UV-B perception and signaling by the UVR8 photoreceptor.
- Molecular understanding of UV-B signaling pathways.
- Signaling crosstalk between UV-B and abiotic stress.
- Potential application of UV-B in agriculture and horticulture.

Guest Editor

Prof. Dr. Shaoshan Li

School of Life Science, South China Normal University, Guangzhou 510631, China

Deadline for manuscript submissions

closed (30 December 2023)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/117827

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

MDPI

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

MDPI

About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences* (*IJMS*) 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology "Jose Mataix", Biomedical Research Center, University of Granada, Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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)