plants

IMPACT FACTOR 4.5 | Indexed in: PubMed | CITESCORE 5.4

an Open Access Journal by MDPI

Integration of Light Signaling, Circadian Clock and Metabolic Responses in a Changing Climate

Guest Editors:

Dr. Gabriela Toledo-Ortiz
James Hutton Institute, Dundee. Invergowrie, Dundee, Scotland DD2 5DA, UK

Dr. Rossana Henriques
School of Biological, Earth & Environmental Sciences and Environmental Research Institute, University College Cork, Distillery Fields, Cork, Ireland

Dr. Elena Monte
Center for Research in Agricultural Genomics (CRAG), Barcelona, Spain

Deadline for manuscript submissions:
20 October 2024

Message from the Guest Editors

Plants use light as an environmental input to coordinate their physiological and developmental processes in order to maximize their survival. Light signals also reset the circadian clock, an essential internal time-keeping mechanism that controls and anticipates daily biological processes. On the other hand, the circadian clock "gates" light responses to ensure that multiple physiological outputs occur at a precise time. Therefore, this interconnection of endogenous circadian signals with light-cycling inputs is essential to optimize both diel and seasonal plant growth responses, developmental transitions, and metabolism. Moreover, a large proportion of oscillating transcripts and their physiological outputs are important for environmental stress responsiveness; however, further research is required to identify the signaling cascades involved, the trade-offs imposed, and the degree of conservation between model plants and crops. This Special Issue will focus on the integration of the circadian clock with light signaling and the metabolic responses that mediate plant growth and development under different environmental conditions, both in model plants and crops.

plants

IMPACT FACTOR 4.5 | Indexed in: PubMed | CITESCORE 5.4

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided.
We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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, PubAg, AGRIS, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q1 (*Plant Sciences*) / CiteScore - Q1 (*Plant Science*)

Contact Us

Plants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
𝕏@Plants_MDPI