

Special Issue

Plant Synthetic Biology and Plant Transcriptome

Message from the Guest Editor

With the advent of multi-omics high-throughput technologies and synthetic biology, the plant research paradigm has shifted to a holistic view of higher plants to understand complex life phenomena and of engineering of biology for the modification of genes, proteins, metabolites, and other cellular components in plants to create a new vista in plant biotechnology. This Special Issue is focused on transcriptomics and synthetic biology for higher plants that are essential for the elucidation of mechanisms in data-intensive approaches and for the design and building of novel or existing photosynthetic systems for improved growth and production of bioactive substances. Original research and review articles covering all aspects of plant transcriptomics for the study of differential gene expression that regulate cell growth and metabolism of plants and resistance to environmental stress with the aid of bioinformatics, and the demonstration of engineering formalism, systematic design, and module assembly in creative reconstruction of plant systems are welcome.

- bioinformatics
- transcriptomics
- synthetic biology
- systems biology
- plant physiology

Guest Editor

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Deadline for manuscript submissions

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About the Journal

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, and 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.

Editor-in-Chief

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