

Special Issue

Sensors, IoT Technologies, Modeling, and Signal Processing for Monitoring Biophysical and Physiological Signals in Plants

Message from the Guest Editors

Plants constantly face biotic and abiotic stresses which cause a reduction in yield and food availability worldwide. In order to face these threats, plants generate physiological and biophysical signals, which can measure if they are being affected and by how much in order to adopt an early and adequate management strategy or to measure the effect of stress treatments to increase defensive secondary metabolites; these signals, which are related to biochemical, enzymatic, and molecular activity, can be detected using suitable sensors that, in many cases, incorporate sophisticated technology that improves the precision of the measurements as well as the suitability, transmission, and analysis of data. Some physiological and biophysical signals present in plants include photosynthesis; transpiration; root, stem, and leaf temperature; chlorophyll fluorescence; visible symptomatology; vibration; sound; electricity; etc. This Special Issue covers, but is not limited to, sensors and IoT technologies used to monitor such signals in plants, data-processing techniques, and modeling to relate biochemical, enzymatic, and molecular activities to biophysical and physiological signals.

Guest Editors

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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.

Editor-in-Chief

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