Special Issue

Wearable Sensors for Plant Health Monitoring

Message from the Guest Editors

With the escalating climate crisis and the accompanying biodiversity loss and agricultural productivity loss, plant health is attracting more attention from the research community. Wearable sensors that can minimally invasively monitor the health status of plants. This Special Issues aims to report up-to-date progress in wearable sensors for plant health monitoring. The sensing modality can be either physical or chemical, or a combination of both, such as hydration, sap flow, microenvironment (temperature and humidity), nutrient concentration, hormones, metabolites, etc. The sensors should have a form factor that is sufficiently small and lightweight for attachment on plants, either noninvasive or invasive. Progress in the miniaturization of readout electronics and wireless communication is also welcome. Demonstration of applications in either simulated or real-world scenarios should be considered in the areas of precision agriculture, crop breeding. biodiversity preservation, etc. In addition, perspectives on the development of this field, including relevant challenges, research directions, application prospects and associated challenges, are also welcome.

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Deadline for manuscript submissions

closed (31 December 2024)



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Impact Factor 5.6 CiteScore 9.8 Indexed in PubMed



mdpi.com/si/199535

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Biosensors is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

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