Special Issue

Bio-Optical Applications in Stress Physiology of Photoautothropic Organisms

Message from the Guest Editors

Photoautotrophic organisms provide a substantial amount of energy via primary production through their photosynthesis. Environmental factors interfere with photosynthesis at different stages if important resources are limited or exceeded. The intertwined relationship and feedback mechanisms connecting chemical regulation with light energy transfer at the photosystems facilitate detailed analysis of the physiological state of phototrophs based on non-invasive optical techniques. We would hereby cordially like to invite you to submit your paper to this Special Issue, comprising recent advances in bio-optical applications for analysis of physiological stress in photoautotrophic organisms. We are welcoming contributions focusing on the development of novel techniques, data analysis, and original research articles addressing stress physiology in phototrophs based on optical application measurements. Keywords

chlorophyll fluorescence analysis
photopigments
photosynthesis activity
photosynthesis imaging
plant stress physiology
ecotoxicology

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closed (30 September 2021)

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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