Special Issue

Nanoparticles as Regulators of Photosynthetic Performance

Message from the Guest Editor

Nanotechnology is a relatively novel field of science and technology. Nanoparticles (NPs) play a crucial role in nanotechnology; their application is one of the newest strategies to improve photosynthetic performance under physiological and stress conditions. Studies have indicated that NPs can be absorbed, transported, and accumulated by plants and could influence their seed germination, photosynthetic performance, growth, and development. Nanoparticles possess unique physical and chemical properties due to their high surface area and nanoscale size. The impact of NPs depends on their chemical composition and surface characteristics. Furthermore, the applied concentration can lead to either a positive or toxic effect on plants. The elucidation of the mechanisms of action of different nanoparticles on various plant species will provide us with the possibility of creating plants with better functions that are resistant to adverse climatic conditions. This Special Issue aims to highlight the mechanisms of action of different types of NPs on photosynthesis and reveal the role of NPs in improving the photosynthetic efficiency of various plant species.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2024)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/204327

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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