



plants



an Open Access Journal by MDPI

Nanoparticles: Their Synthesis and Application to Control Plant-Associated Bacteria

Guest Editors:

Dr. Tamas Kovacs

Dr. Miroslav Baránek

Dr. Katarina Gasic

Prof. Dr. Jeffrey B. Jones

Dr. Ralf Koebnik

Dr. Mathews L. Paret

Dr. Emilio Stefani

Deadline for manuscript
submissions:

closed (15 January 2023)

Message from the Guest Editors

Plant diseases are one of the most important limiting factors of food production. Many important diseases are induced by the plant pathogenic bacteria that cause yearly global high production losses. Environmental pollution can also limit the use of the produced crops, causing serious human disease outbreaks when infected water is used for irrigation. Therefore, the global demand for food production escalates, also ensuring that food security exists nowadays.

Nanoparticles have unique properties that are important for agricultural applications. In addition to their strong antibacterial effects, their potential for timed and/or targeted delivery is also exploitable from their structural properties.

This Special Issue will accept papers dealing with the following subjects:

Nanomaterial applications against phytopathogenic bacteria;

Nanomaterial applications against human pathogenic bacteria adapted and transmitted via infected plants;

Production of novel nanomaterials applicable against plant-associated bacteria;

Targeted and timed delivery of nanomaterials in crop production systems;

Effect of nanomaterials on the plants and microbiome in crop production systems.



mdpi.com/si/114212

Special Issue



plants



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando

Department of Plant Science,
University of Manitoba, Winnipeg,
MB R3T 2N2, Canada

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Plant Sciences*) / CiteScore - Q1 (*Plant Science*)

Contact Us

Plants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)