





an Open Access Journal by MDPI

The Role of Metallic Nanoparticles in Crop Growth and Development

Guest Editor:

Prof. Xingmao Ma

Texas A&M Univ, Zachry Dept Civil Engn, College Stn, TX 77843 USA.

Deadline for manuscript submissions:

closed (20 October 2021)

Message from the Guest Editor

Exploration for sustainable applications of nanotechnology in agriculture has gained tremendous momentum over the past few years. The enormous potential of metallic nanoparticles as crop growth promotors, plant disease inhibitors, and slow-releasing nutrient sources is increasingly recognized. In addition to their direct interactions with plants, agriculturally applied metallic nanoparticles interact with coexisting environmental pollutants and plant nutrients to alter their availability and toxicity. This secondary effect of metallic nanoparticles on the fate and transport of co-existing chemicals has attracted more attention recently. It is important to realize that in the agricultural setting, other factors, most notably soil health, play key roles in dictating the impact of metallic nanoparticles on crop growth and development. This Special Issue aims to provide a concentrated venue to publish the most impactful research on the broad field of metallic nanoparticles and crop growth to contribute to the advancement of sustainable applications of nanotechnology in agriculture. Both novel research articles and reviews will be considered.











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. Agriculture is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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), PubAg, AGRIS, RePEc, and other databases.

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

Contact Us