

Special Issue

Interaction between Nanoparticles and Plants

Message from the Guest Editor

Nanotechnology is an innovative and a promising field of studies that is developing at a rapid speed today. The rapidly developing commercial and industrial usage of nanotechnology leads to increased emission of nanoparticles into the environment and inevitably to different effects on living organisms, including plants. Our knowledge of the influence of nanoparticles (NPs) on plants' development is relatively small, despite the various literature reports on the interaction of nanoparticles with plants. Therefore, this Special Issue aims to study the impact of nanoparticles at various levels of plant life (e.g., structural, ultrastructural, physiological, biochemical, molecular). Topics for this Special Issue include but are not limited to the following:

- Nanoparticles and plant growth, physiology and biochemistry on the cell, tissue and organ level;
- Mechanisms and routes of entry of nanoparticles to the plants;
- Movement of nanoparticles within the plant on the cell, tissue, and organ level;
- Nanotoxicology;
- Green synthesis;
- Nanoparticles and plant–pathogen interaction.

Guest Editor

Prof. Dr. Ewa Kurczyńska

Institute of Biology, Biotechnology and Environmental Protection,
Faculty of Natural Sciences, University of Silesia in Katowice, 28
Jagiellonska St, 40-032 Katowice, Poland

Deadline for manuscript submissions

closed (30 September 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/43944

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

[mdpi.com/journal/
appls](https://mdpi.com/journal/appls)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)