

Special Issue

Biotechnology of Plants and Pathogens

Message from the Guest Editors

Interactions between various pathogens (fungi, bacteria, viruses, nematodes, oomycetes, phytoplasmas, etc.) and their host plants represent an important research field in both fundamental and applied plant sciences. Diverse tools are available for integrated plant disease management, such as pathogen/vector/infected-plant exclusion and/or eradication, cropping system improvement, protection using physical barriers, chemical control using fungicides/bactericides/nematicides, biological control using pathogen-suppressing microbes and other agents, and the development of disease-resistant cultivars. The application of modern biotechnologies provides novel approaches for plant disease control, including, but not limited to, plant disease resistance gene identification, the modification of plants and pathogens using cutting-edge genetic engineering and genome editing techniques, the development of new biocontrol agents for reducing pesticide usage, and microbiomes for improving plant tolerance to biotic/abiotic stress. In this Special Issue, we welcome the submission of original research and review manuscripts which revolve around plant-microbe interaction biotechnologies.

Guest Editors

Dr. Ying Zhai

Department of Plant Pathology, Washington State University, Pullman, WA 99164, USA

Dr. Chuntao Yin

Integrated Cropping Systems Research Unit, USDA-ARS, Brookings, SD 57006, USA

Deadline for manuscript submissions

closed (20 October 2023)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/171421

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

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)