

## Special Issue

# Advanced Computational Techniques for Plant Disease Detection

### Message from the Guest Editors

In the realm of agriculture, the timely detection of plant diseases is crucial for ensuring crop health and productivity. With the advent of digital technology, advanced computational techniques have emerged as powerful tools in this endeavor. These techniques leverage cutting-edge algorithms and machine learning models that can be used to analyze vast amounts of data, from high-resolution images to environmental sensors, as well as identify patterns and anomalies indicative of disease. The integration of these advanced computational techniques with traditional agricultural practices has led to smarter, more efficient, and sustainable farming practices. As research continues to advance, the potential for the early detection, prevention, and management of plant diseases will only grow, ultimately benefiting global food supply and the environment.

---

### Guest Editors

**Dr. Haixi Zhang**

College of Information Engineering, Northwest A&F University, Xianyang 712100, China

**Dr. Zhaoqiang Xia**

School of Electronics and Information, Northwestern Polytechnical University, Xi'an 710060, China

---

### Deadline for manuscript submissions

closed (20 February 2026)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/206335](https://mdpi.com/si/206335)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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

[applsci](https://doi.org/10.3390/applsci)





# 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, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

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