# Special Issue

# Engineered Nanomaterials and Agriculture: Moving towards Their Contribution into Food Security

### Message from the Guest Editor

Research advances have shown that engineered nanomaterials (ENMs) may have beneficial effects in plants. The reports mention that at certain concentrations, ENMs—especially microelement nanoparticles—reduce lipid peroxidation, increase pigments, and act as fertilizers or pesticides. Additionally, the data indicate beneficial changes in metabolomics and metallomics. However, the boundary between beneficial and detrimental concentrations is still not well defined. This Special Issue of *Nanomaterials* attempts to cover reports of studies focused on the discovery of relevant concentrations of ENMs that are able to improve food production. This collection of papers may lay the foundation for more literature that seeks to enable the increase of food security and, at the same time, reduce environmental impacts derived from the extensive use of conventional fertilizers and pesticides. Prof. José Peralta-Videa

### Guest Editor

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### Deadline for manuscript submissions

closed (31 March 2020)

**Nanomaterials**

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/17876

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## Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

## Editor-in-Chief

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