

IMPACT FACTOR 4.5





an Open Access Journal by MDPI

Plant-Based Green Synthesis of Bioactive Nanoparticles: Innovation and Application

Guest Editors:

Dr. Raluca Şuică-Bunghez

National Institute for Research and Development in Chemistry and Petrochemistry, ICECHIM, 060021 Bucharest, Romania

Dr. Radu Claudiu Fierascu

National Institute for Research and Development in Chemistry and Petrochemistry, ICECHIM, 060021 Bucharest. Romania

Deadline for manuscript submissions:

30 November 2024

Message from the Guest Editors

Dear Colleagues,

In recent years, the focus of nanotechnology has shifted from classical synthesis methods to modern, "green" methods. These methods include techniques such as biosynthesis (the development of nanomaterials using a living organism, i.e., fungi), radiation-assisted synthesis, or phytosynthesis (the development of nanomaterials using plant extracts). Very promising, this latter method includes the use of a wide range of plant-related materials, such as pulp, core, peel from fruits, stem, root, petal flowers, and the leaves from plants or algae, while also employing a wide range of solvents.

The goal of the present Special Issue is to focus on the influence of the extract composition and characteristics of the vegetal materials, relating to the properties of the obtained nanoparticles, as well as the most recent findings on the development and application of phytosynthesized nanoparticles. The extracts can be characterized through a wide range of phytochemical assays (qualitative and quantitative), as well as more appropriate, analytical methods (including HPLC or GC-MS).











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha FernandoDepartment of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and communitys on topics of interest to the plant research community.

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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

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

Contact Us