Special Issue

Green Biotechnology for Synthesis of Metal Nanoparticles from Plant Extracts

Message from the Guest Editor

Recently, many studies have showcased the synthesis and application of green precious metal nanomaterials. In particular, plant leaf extracts containing various phytochemicals are suitable for the synthesis of precious metal nanomaterials, and metal ions can be reduced to the corresponding metals using benign solvent water under hydrothermal conditions without any other chemicals. Precious metal nanoparticles—such as gold (Au), silver (Ag), and copper (Cu), as well as other metals, such as platinum (Pt) and nickel (Ni)—with superior mechanical, magnetic, and antibacterial properties, can be prepared and applied in a variety of fields, such as in bioimaging and biomedicine. Plant extracts are also good candidates for the fabrication of metal-phytochemical nanocomposites. This Special Issue, seeks high-quality research focusing on the functionalization of precious metal nanoparticles. Topics include the following:

- Green synthesis and application of metal nanomaterials.
- Construction of precious metal nanomaterials via plant extracts.
- Multifunctional metal nanomaterial composites and their applications.

Guest Editor

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Deadline for manuscript submissions

closed (20 October 2025)

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/211504

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