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## **Green Synthesis of Silver Nanoparticles Using Medicinal Plants**

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**Abstract:** Nanotechnology has marked a significant revolution in various areas of science. Nanoscience and nanotech- neology are involved in the production and application of nanoparticles that can be used in various fields. Silver nanoparticles (AgNPs), among other nanoparticles, have received substantial attention because of their unique properties. This review article focuses on the green synthesis of AgNPs using medicinal plant extracts. Green synthesized AgNPs offer numerous advantages, including energy efficiency, low toxicity, high yields, cost- effectiveness, eco-friendliness, and ready availability. The effects of pH, temperature, incubation time, light and plant extracts, and silver nitrate (AgNO<sub>3</sub>) concentrations on the green synthesis of AgNPs are discussed. This review also discusses analytical techniques for the characterization of AgNPs. Furthermore, recent advances in the application of biosynthesized AgNPs from herbal plants as therapeutic agents against bacteria, fungi, and tumors are considered. Finally, the challenges and potential future research directions for the synthesis of AgNPs using green technology are discussed.

**Keywords:** Green synthesis, Silver nanoparticles, Medicinal plants, Cancer therapy, Physical method, Chemical method.



