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Gold Nanoparticles Synthesized from Plant Materials and Application of **Bioremediation and Pharmacological**

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Abstract

These days, nanotechnology and nanoscience are attracting a lot of attention because of their unique characteristics and diverse range of uses. One of the most important metal nanoparticles, gold nanoparticles (AuNPs), has a wide range of uses in both research and industry. The market for AuNPs is expanding quickly. Due to the drawbacks of the chemical and physical procedures, much attention has been given to the creation of novel strategies for the synthesis of AuNPs with good morphological features employing biological sources. The synthesis, characterisation, and uses of AuNPs are infuenced by a number of variables, including contact duration, temperature, pH of the solution medium, concentration of gold precursors, and volume of plant extract. Since the morphological characteristics of AuNPs must be evaluated, characterising synthetic AuNPs is crucial. Potential for use in a variety of applications. This study emphasises diferent ways to make AuNPs, factors a fecting how the metal is biosynthesized from plant extract, various methods for characterising AuNPs, and their potential for use in bioremediation and biomedical applications.

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Con ict of Interest

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