



Role of Antioxidant in Preparation of Metallic Nanoparticles

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ABSTRACT: The preparation of metallic nanoparticles involves reduction of the metal ion using turkevich, burst, chemical, physical and sonochemical methods. Green method has drawn great attention as compared to physical and chemical methods because it was found to be more energy efficient and able to eliminate the use of hazardous chemicals. The phytoconstituents that are used to synthesize the nanoparticles are known to be rich in polyols and antioxidants. Antioxidants like enzymatic and non-enzymatic substances which are involved in management of free radical formation, also act as stabilizing as well as reducing agent in the preparation of nanoparticles. The reduction mechanism is also capable to control the size and stability of synthesized nanoparticles by formation of stable bonding between metallic nanoparticles and phytochemicals present in leaf extract. In the current presentation various plant extracts and isolated phytoconstituents used for synthesis of metallic nanoparticles are discussed. © 2019 iGlobal Research and Publishing Foundation. All rights reserved.

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