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## Review Paper

### The Biosynthesis of Silver Nano-Particles-A Review

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#### ABSTRACT

Silver has been acknowledged as safe anti-microbial agent used for hundreds of centuries. At present Silver demonstrates a very high potential in a wide range of biological applications, mostly in the form of nano-particles. Important advantages of bio-synthetic are reducing the polluting substances as by-products, its cost-effectiveness and the affluence of raw material (such as plants, microbes, proteins etc). This has been the motivation for the researchers to find alternate ways to synthesize silver nano-particles in comparison to other synthetic techniques where harmful reductive species are used. This eco-friendly aspect has now become a major social issue and an instrument in combating pollution through reduction or elimination of hazardous solid by-products, gases, liquid residues which is now becoming more and more popular amongst biotechnologist and researchers. During the last five years, many vigorous attempts had been put into developing new greener and economical method for the synthesis of Silver nano-particles. This review describes a comprehensive overview of the researches on biological synthesis of silver nano-particles, drawbacks of other synthetic methods and future prospects of Ag-NPs.

**Keywords:** Biosynthesis, Silver nano-particles, Eco-friendly, Antimicrobial, Bulk/colloidal silver particles, Reducing agent.

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