



Research article

Eco friendly green synthesized silver nanoparticle with *Ocimum basilicum* leaves aqueous extract

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Abstract

Aqueous extract of *Ocimum basilicum* is used as reducing agent as well as capping agent for the environmentally friendly syntheses of silver nanoparticles. The nanoparticles were characterized by UV-Visible spectral analysis, Transmission electron microscopy (TEM), X-ray diffraction (XRD), zeta potential and FTIR analysis. Silver nanoparticle with in the size range 50-100 nm having symmetric SRD band centered on 436 nm are obtained for the colloid synthesized at room temperature. The crystallinity of the nanoparticles is confirmed from XRD pattern and which also showed a good result in zeta potential. From the FTIR study it is revealed that biomolecules present in extract are responsible for capping as well as stabilization of silver nanoparticle.
