

Potential of bacterial culture media in biofabrication of metal nanoparticles and the therapeutic potential of the as-synthesized nanoparticles in conjunction with artemisinin against MDA-MB-231 breast cancer cells.

Sample Preparation (Ag Nanoparticles)

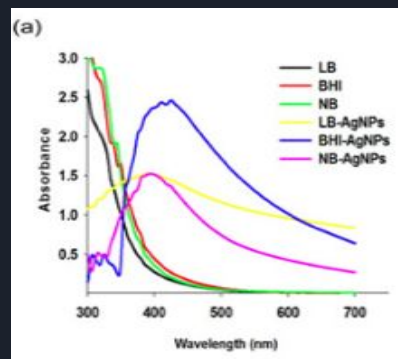
AgNO₃ nanoparticles (0.1 M) was incubated with LB (25 mg/L), BHI (37 mg/L) & NB (13 mg/L) at room temperature under continuous stirring conditions (120 rpm). The resultant reduction of the corresponding ions to the corresponding NPs was ascertained by UV/VIS spectroscopy.

HAuCl₄ (0.1 M) and CuSO₄·5H₂O (0.1 M) solutions were incubated with BHI at RT and the resultant reduction of the corresponding ions was ascertained by UV/VIS spectroscopy.

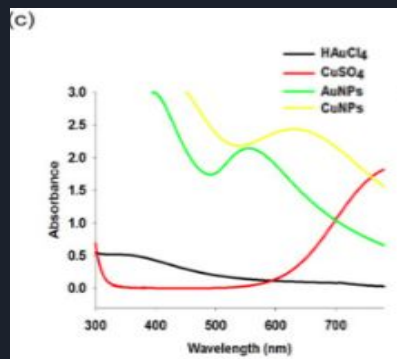
The nanoparticles can also be synthesized from 30 g of *Aloe vera* to form a 30% solution at RT under continuous stirring condition (120 rpm).

Analytical Results

The reduction of the Ag ions was examined on a Lambda 25 UV/Vis dual-beam spectrophotometer by scanning in the range from 300 to 800 nm with 5 nm resolution, using Sigma Plot version 11 software.



Representative UV/VIS spectra of AgNPs following incubation of AgNO₃ solution with LB, BHI, and NB CMs, respectively.



Representative UV/VIS spectra of AuNPs and CuNPs following incubation of HAuCl₄ and CuSO₄ solution with BHI CM.