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(57) Abstract:

The present invention pertains to the non-toxic Tollens method for synthesizing antimicrobial silver nanoparticles (AgNPs) coating on paper currency notes and electronic gadget screens for prevention of infectious diseases through evaluate its antimicrobial efficacy against both bacteria and fungi by microbial screening methods. The technical advancement of the present invention is design the antimicrobial protective layer on paper currency notes and electronic gadget screen surfaces for prevention of microbial contamination. For this we have chosen AgNPs, which are prepared from a simple Tollens process which is used to identify aldehyde functional group in the organic chemistry, because of its significant antimicrobial activity, AgNPs have several merit over normal antibiotics which includes long period of effectiveness and will not initiate drug resistance among the microbial strains.

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