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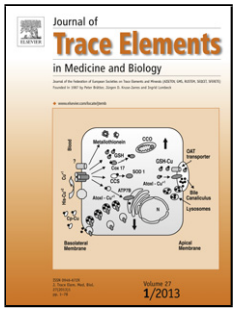

Title: Biomedical potential of actinobacterially synthesised selenium nanoparticles with special reference to anti-biofilm, anti-oxidant, wound healing, cytotoxic and anti-viral activities

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Biomedical potential of actinobacterially synthesised selenium nanoparticles with special reference to anti-biofilm, anti-oxidant, wound healing, cytotoxic and anti-viral activities

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Abstract

Currently, there is an ever-increasing need to develop environmentally benign processes in place of synthetic protocols. As a result, researchers in the field of nanoparticle synthesis are focusing their attention on microbes from rare biological ecosystems. One potential actinobacterium, *Streptomyces minutiscleroticus* M10A62 isolated from a magnesite mine had the ability to synthesize selenium nanoparticles (SeNPs), extracellularly. Actinobacteria mediated SeNP synthesis were characterized by UV-visible, fourier transform infrared (FT-IR), X-ray diffraction (XRD), energy dispersive X-ray spectroscopy (EDX) and high resolution transmission