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Note

Synthesis of polysaccharide-stabilized gold and silver nanoparticles: a green method

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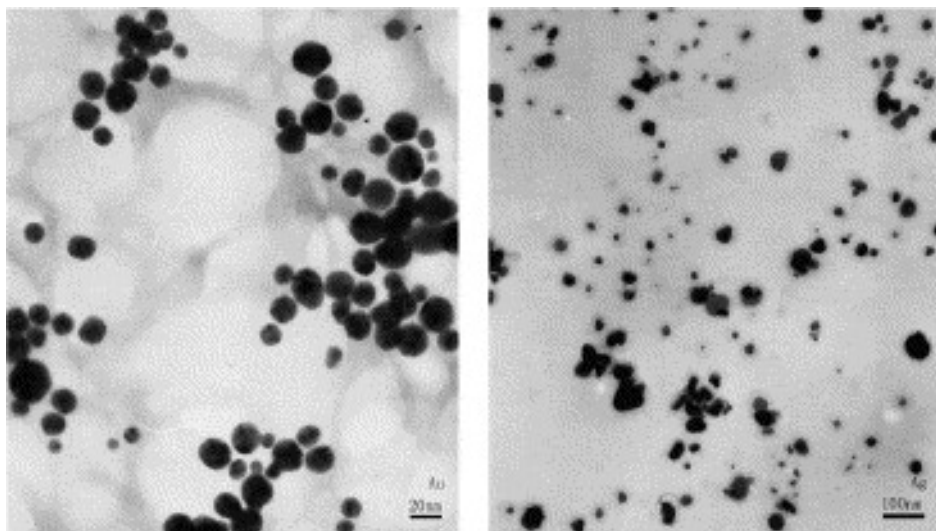
Abstract

A simple, green method was developed for the synthesis of gold and silver nanoparticles by using polysaccharides as reducing/stabilizing agents. The obtained positively charged chitosan-stabilized gold nanoparticles and negatively charged heparin-stabilized silver nanoparticles were characterized with UV-vis spectroscopy and transmission electron microscopy. The results illustrated the formation of gold and silver nanoparticles inside the nanoscopic polysaccharide templates. Moreover, the morphology and size distribution of prepared gold and silver nanoparticles varied with the concentration of both the polysaccharides and the precursor metal salts

Graphical abstract

A simple, green method was developed for the synthesis of gold and silver nanoparticles

by using polysaccharides as reducing/stabilizing agents.



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Keywords

Polysaccharides; Synthesis; Nanoparticles; "Green" method

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