



Synthesis of Gold Nanoparticles Using Red Algae Extract

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Abstract:

A method for preparing gold metal nanoparticles, e.g., nanospheres and nanoprisms, includes combining an extract of red algae with chloroauric acid (HAuCl₄). The red algae can be *Laurencia papillosa*. The extract can include a water solvent extract. The chloroauric acid (HAuCl₄) can be in an aqueous solution. The method can include providing chloroauric acid

(HAuCl₄), providing a red algae extract, and combining the chloroauric acid (HAuCl₄) and the red algae extract to produce gold nanoparticles.

Keywords: Gold nanoparticles; Nanospheres; Nanoprisms; GNPs; Red algae; *Laurencia papillosa*, Nanomedicine; TEM; FESEM; AFM; XRD; FTIR

Biography:

Ayman E. El-Sharkawey has completed his PhD at the age of 31 years from PhD Medicinal and Bio-nano Chemistry, University of Liverpool, England 1998 and postdoctoral studies from Stanford University School of Medicine. He



is the Assistant Head of Nanoscopy Science Center, Faculty of Science, University of Kuwait., He has published more than 23 papers in reputed journals and has been serving as an editorial board member of nanomedicine and nanotechnology.

Recent Publications:

1. Synthesis of Gold Nanoparticles Using Red Algae Extract