IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, November 2022
Impact Factor: 6.252

Metallic Nanoparticles in Pharmaceutical Applications

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Abstract: *Metallic nano particle is nano sized metals with dimensions (length, width, thickness) within the size range of 1-100nm. In 1857, Faraday first investigated the existence of metallic nano particles in solution. In 1908, Mie gave a quantitative explanation of their colour. Today these nano materials can be prepared and modified with various chemical functional groups which allow them to bind with antibodies, ligands and drugs. Metallic nanoparticles give wide range of application in therapeutic area, biotechnology, vehicles for gene and drug delivery. It provides the readers, detailed information on the synthesis by various methods, characterization, with particular focus on therapeutic application along with potential side effects and their future perspective. Recent headway had opened the way to site-specific targeting and drug delivery by these metallic nanoparticles.*

Keywords: Silver Nanoparticles, Metal Nanoparticle; Catalyst; Gold; Platinum, Gold Nanoparticles, Iron Oxide Nanoparticles.

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Impact Factor: 6.252

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