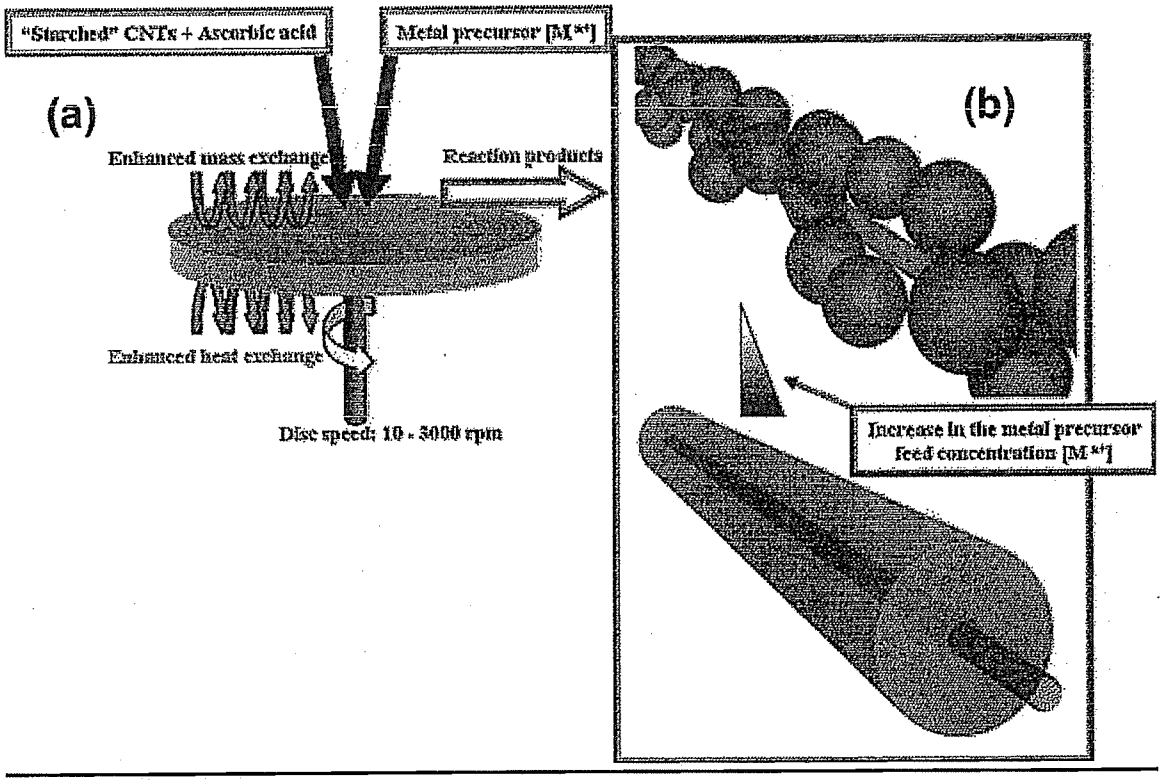

"Starched" CNTs + Ascorbic acid
Metal precursor [M*]
(a)
Enhanced mass exchange
Reaction products
Enhanced heat exchange
Disc speed: 10 - 3000 rpm
(b)
Increase in the metal precursor feed concentration [M*]

Figure 1

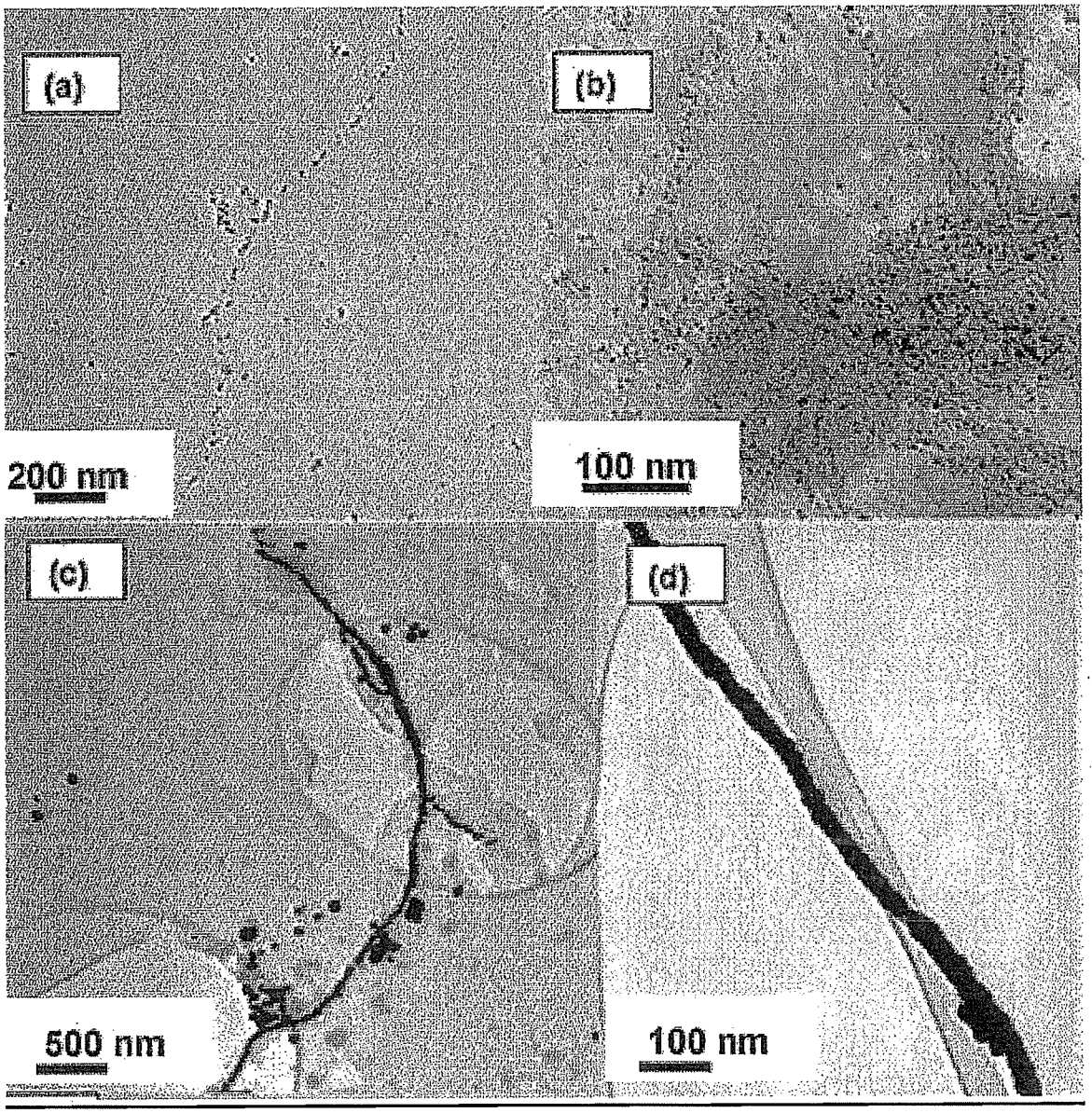


Figure 2

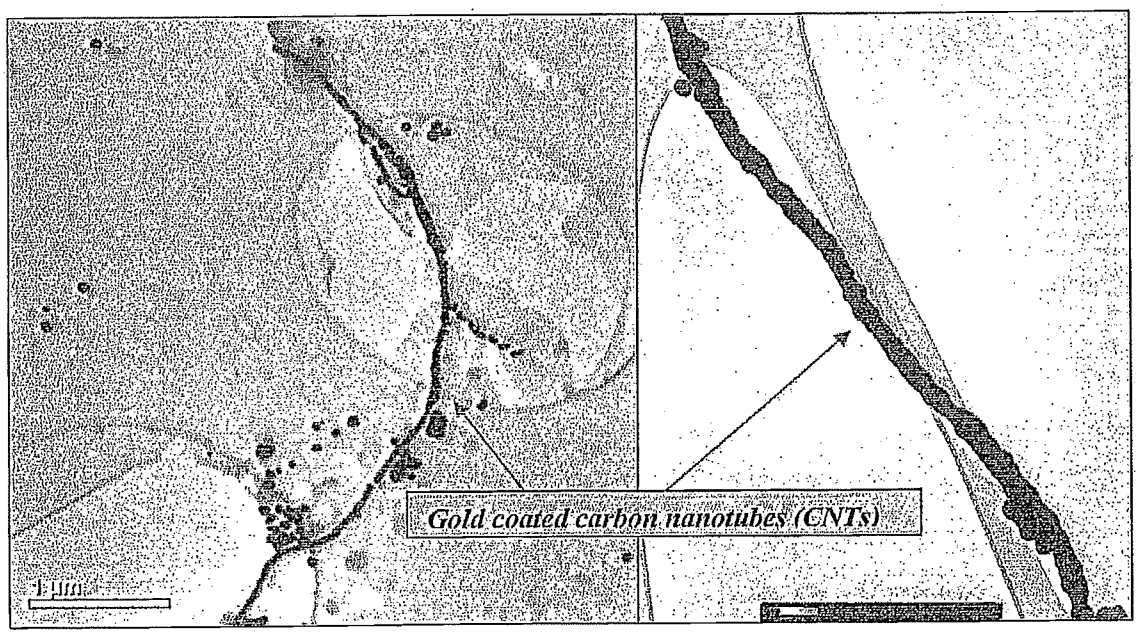


Figure 3

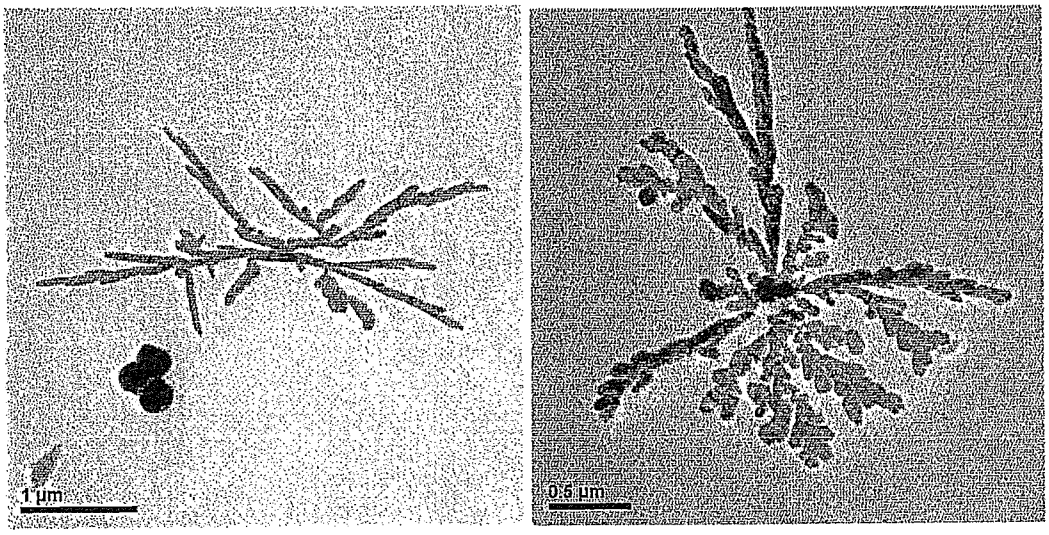


Figure 4

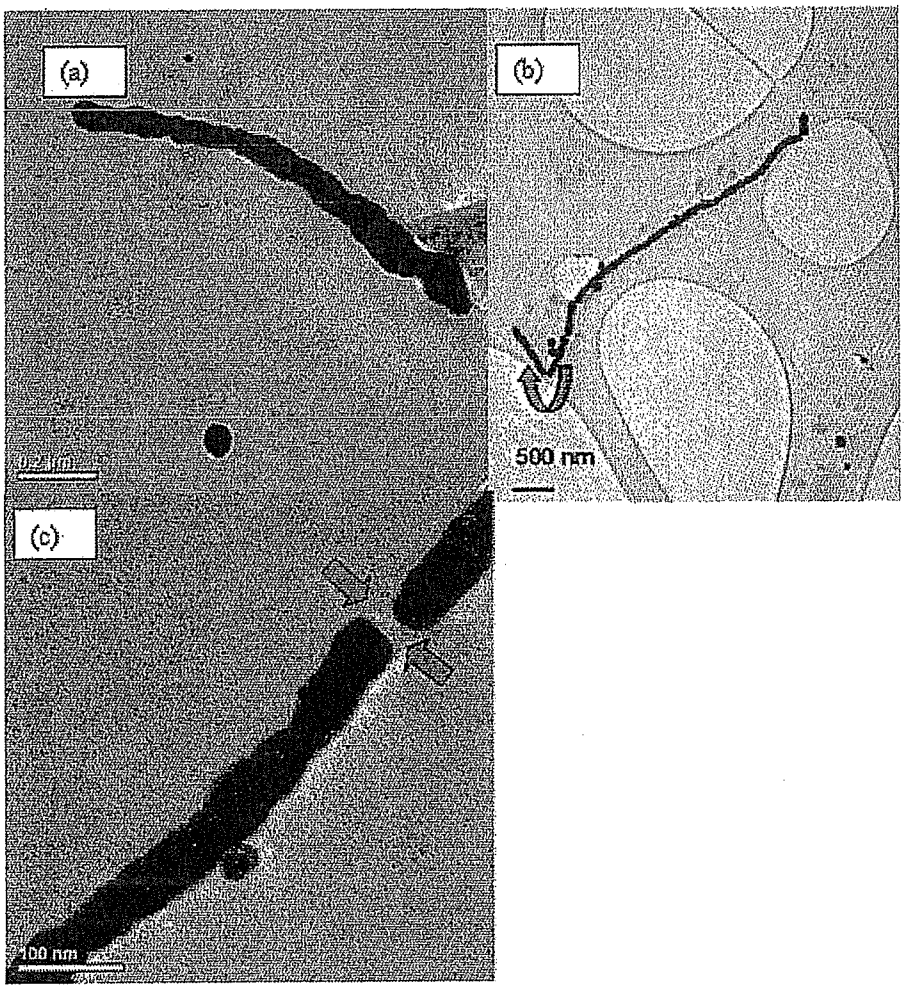


Figure 5

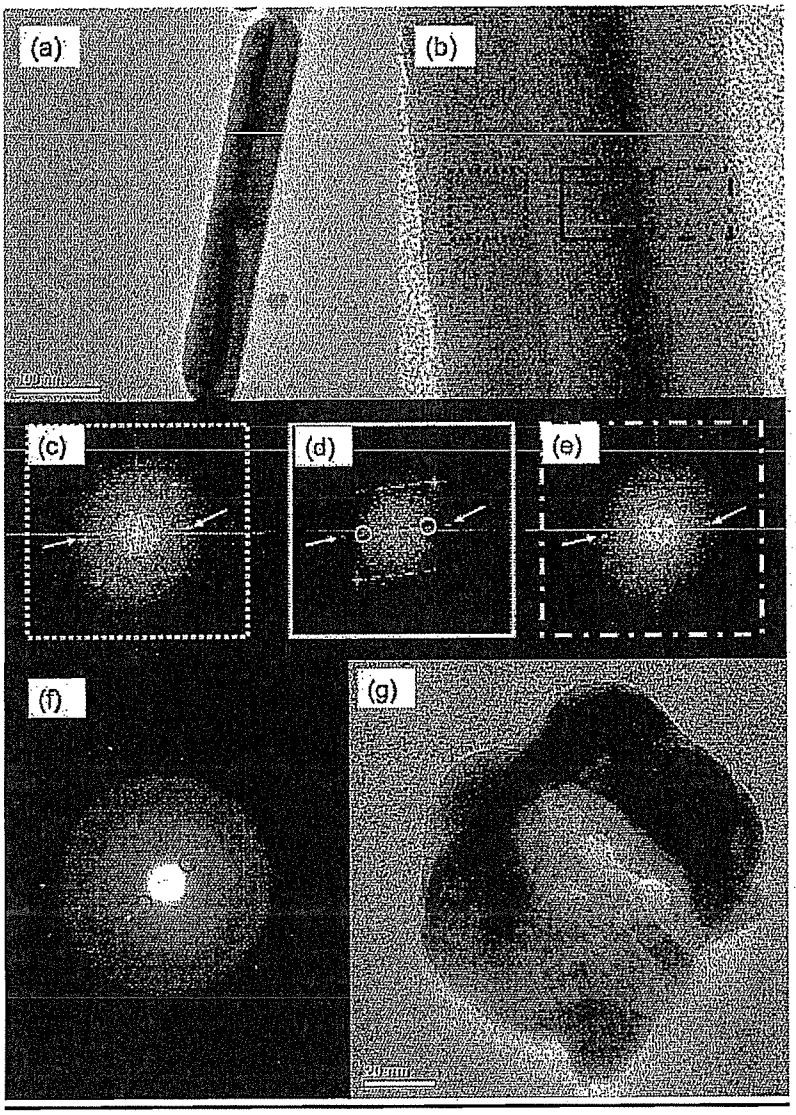
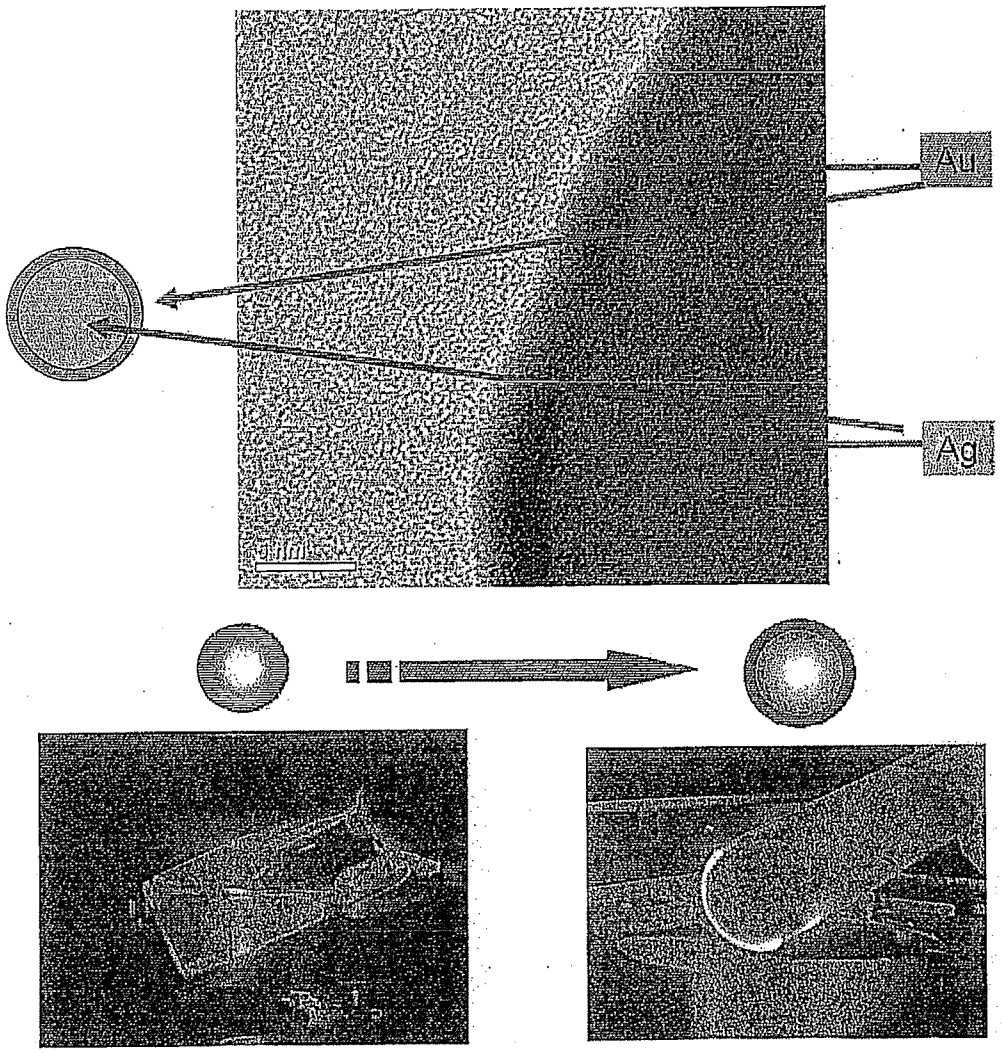


Figure 6



Scattering of green laser by gold nano-particles (Tyndall effect)

Luminescence of gold/silver nano-hybrids under green laser

Figure 7

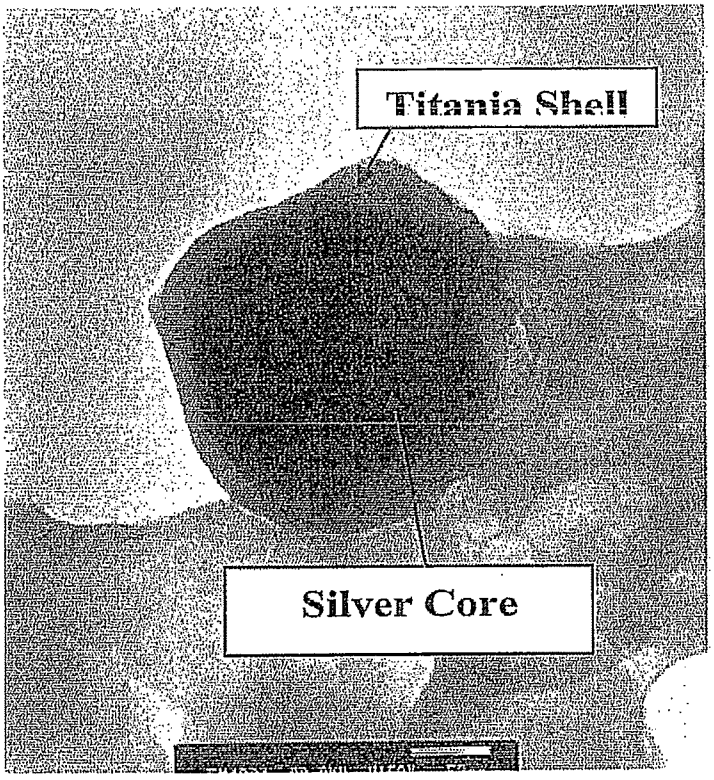


Figure 8

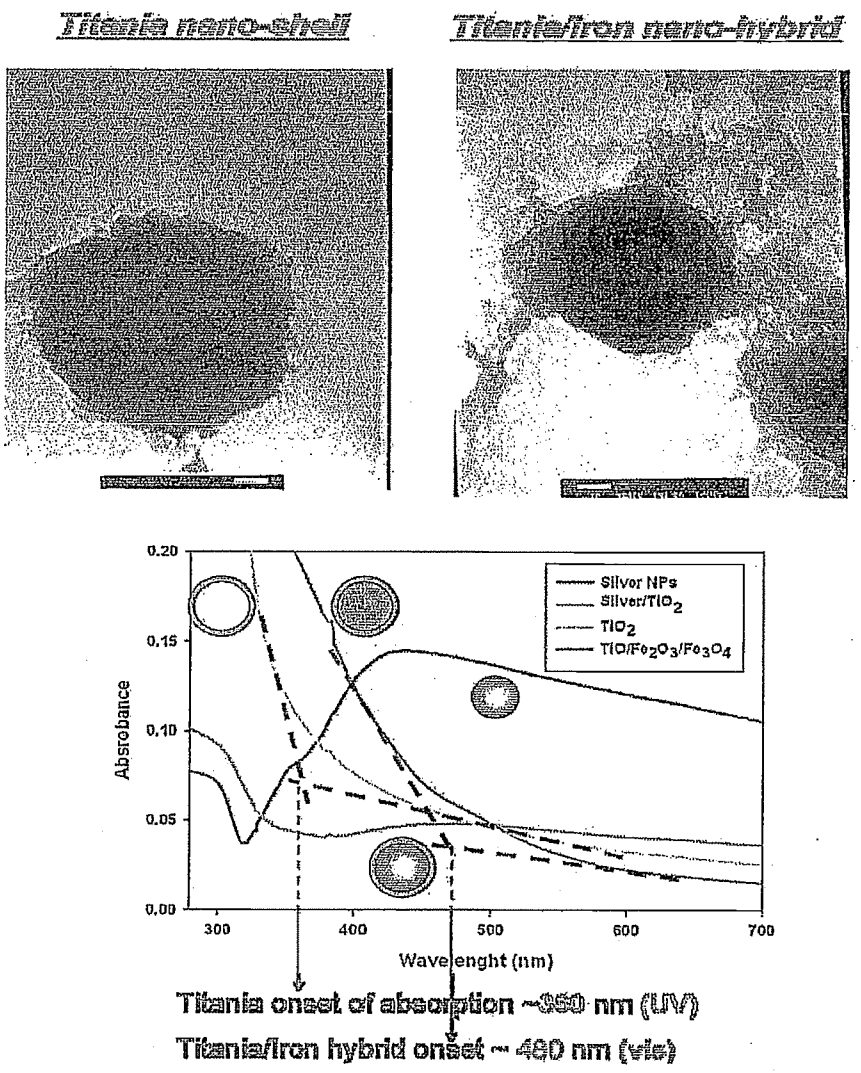

Titania nano-shell
Titania/iron nano-hybrid
Absrobance
0.20
0.15
0.10
0.05
0.00
300
400
500
600
700
Wave enght (nm)
Silver NPs
Silver/TiO2
TiO2
TiO/Fe2O3/Fe3O4
Titania onset of absorption ~360 nm (UV)
Titania/iron hybrid onset ~ 480 nm (vis)

Figure 9