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Core – Shell Properties of Au@Ag and Ag@Au Colloidal system Prepared by Laser Ablation

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Abstract:In this research was prepared Core-shell nanocolloid system of Au-Ag by using of Nd-YAG laser with (1064nm) wavelength and (40) mJ energy, in (DDDW). Structural and spectral Properties were studied by using Transmission electron microscope (TEM) and UV-Visibl. Spectrophotometer, where TEM images showed formation of Core-Shell As well as TEM images showed nanoparticles of the gold colloidal with configure the nano-sized particles less than 10 nm. As well as the (UV - visible) Spectrum showed formation (Au_{Core}-Ag_{Shell}) and (Ag_{Core}- Au_{Shell}) in both cases shifted (SPR) peaks to (450) nm, and to 470 nm, respectively, this confirms formation surface overlap of (SPR), between (Core) and

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