

Supplementary Information

Short Ligands Offer Long-Term Water Stability and Plasmon Tunability for Silver Nanoparticles

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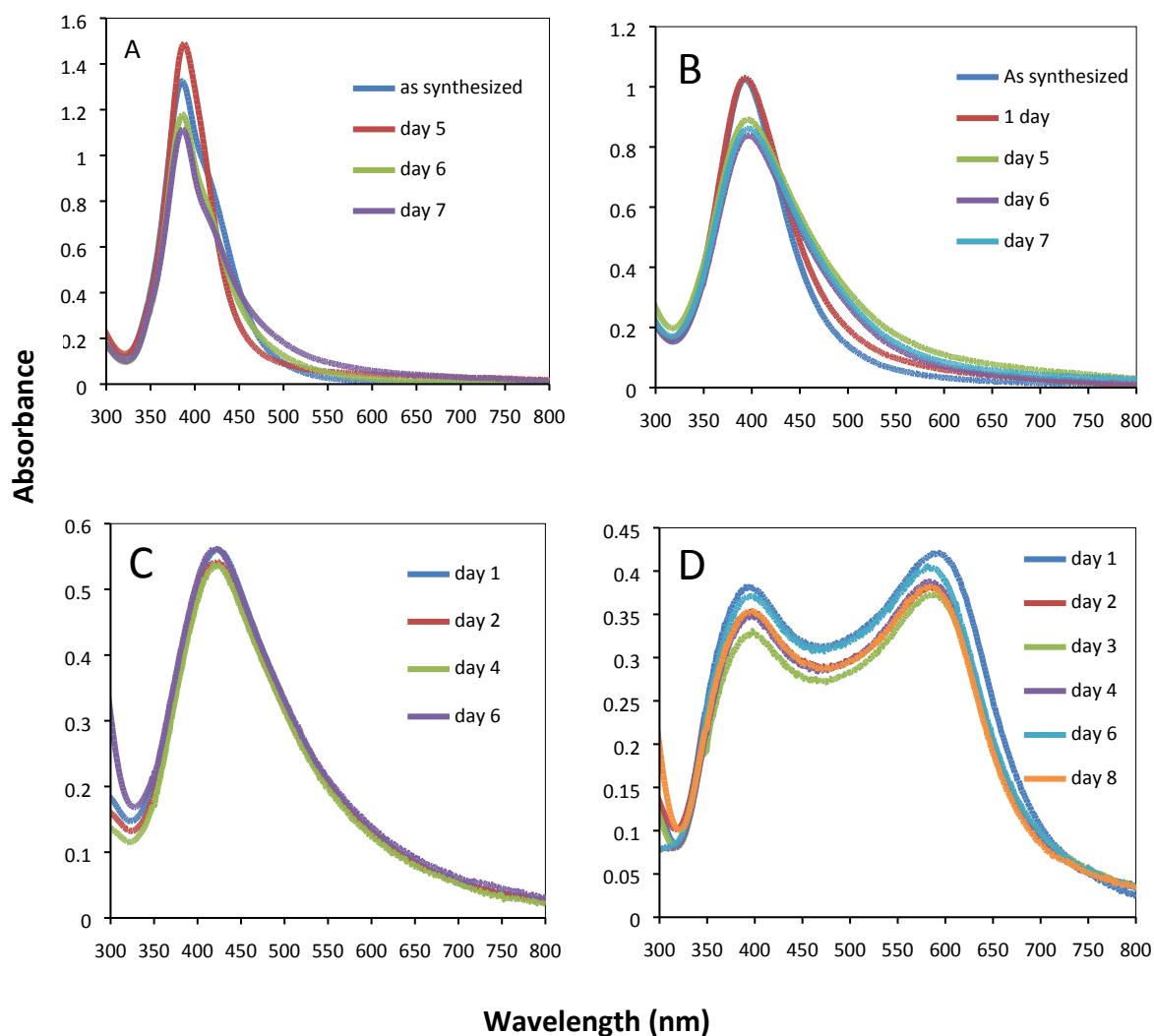
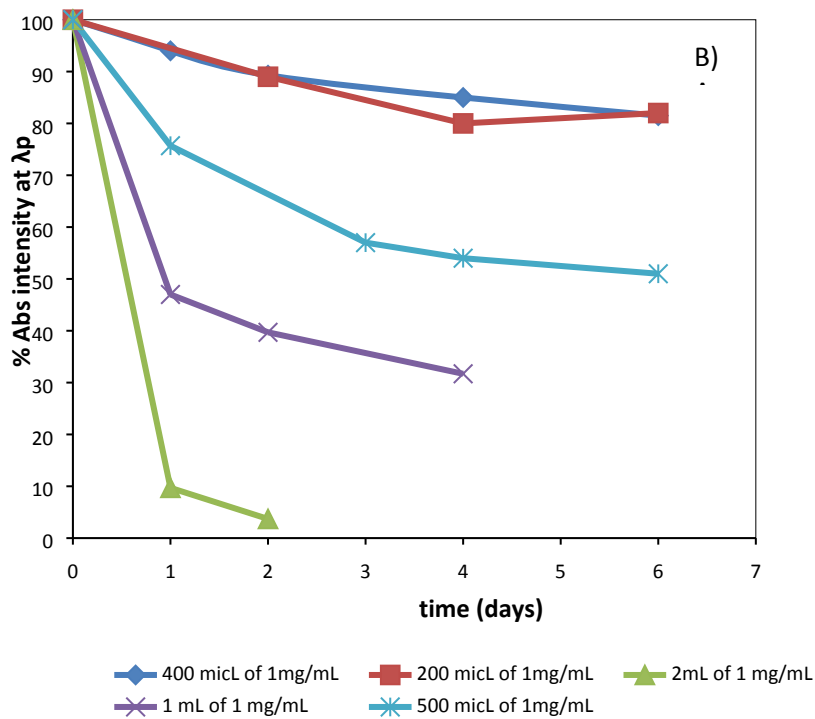
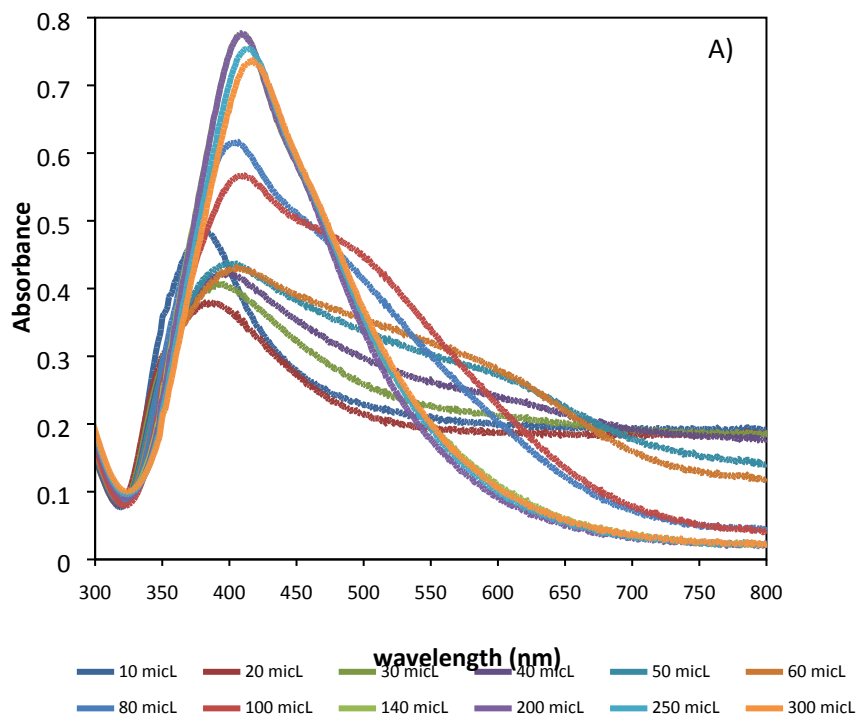


Figure SI-1: Full extinction spectra collected over time for AgNPs stabilized by A): glycine, B): cysteine, C): DTT and D): cysteamine.



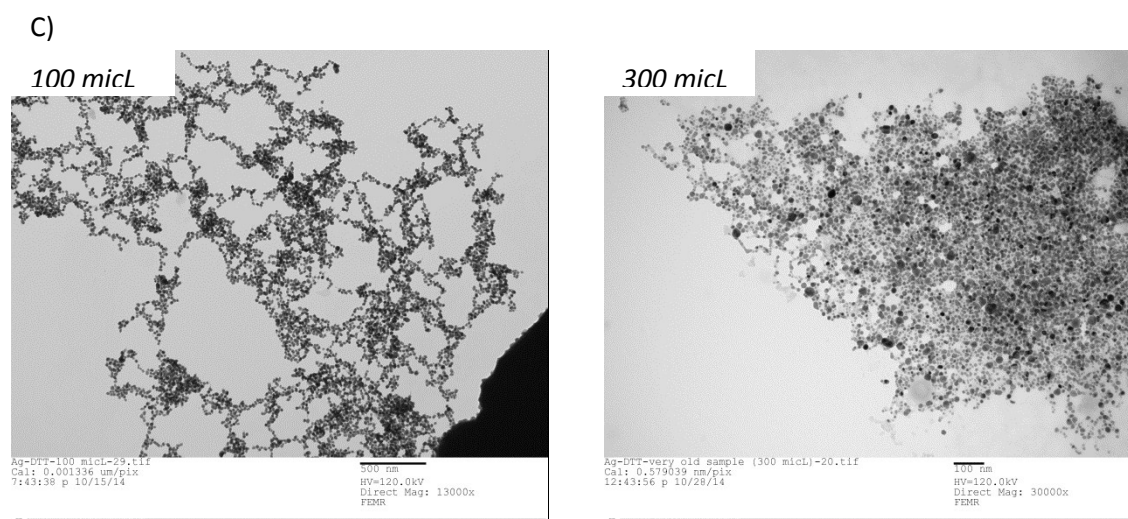
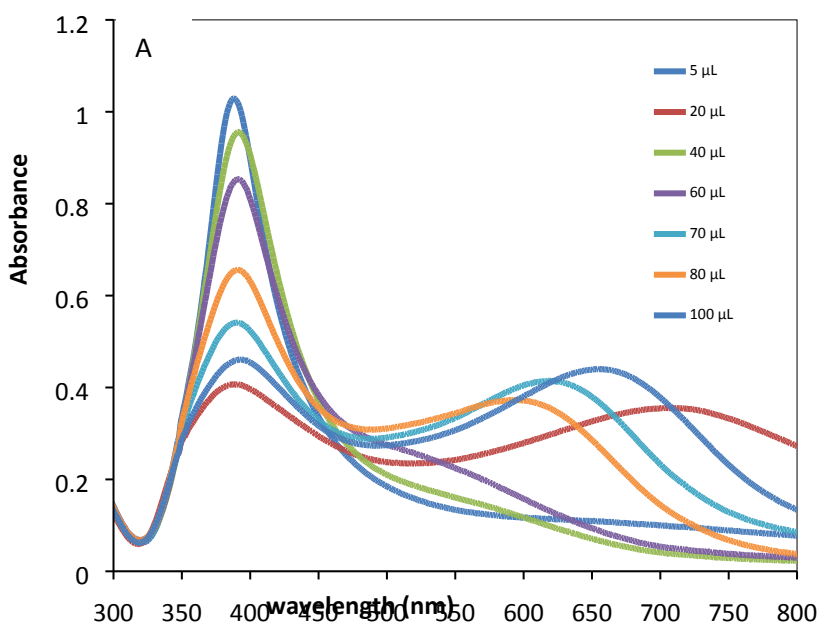


Figure SI-2: Effect of DTT:AgNP molar ratio on A) extinction spectra, B) stability and C) cross-linking of AgNPs . Similar effects were noticed for AgNPs modified with cysteine and cysteamine ligands.



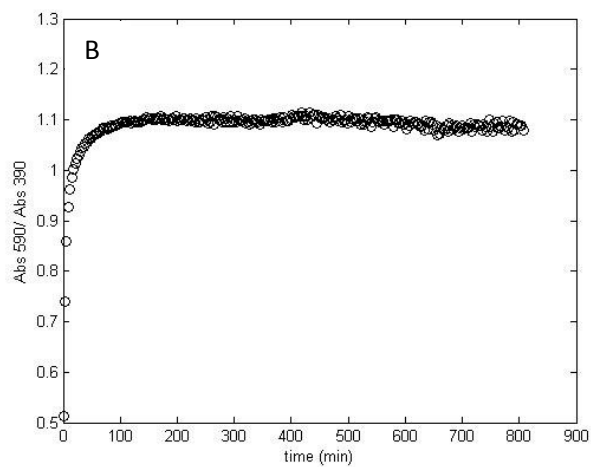


Figure SI-3. A) Extinction spectra of Ag-cysteamine in the presence of different amounts of 3.9 mM cysteamine solution. B) Kinetic evolution of Abs_{590}/Abs_{390} of Ag-cysteamine colloid (100 μ L of 3.9 mM of cysteamine solution was used).

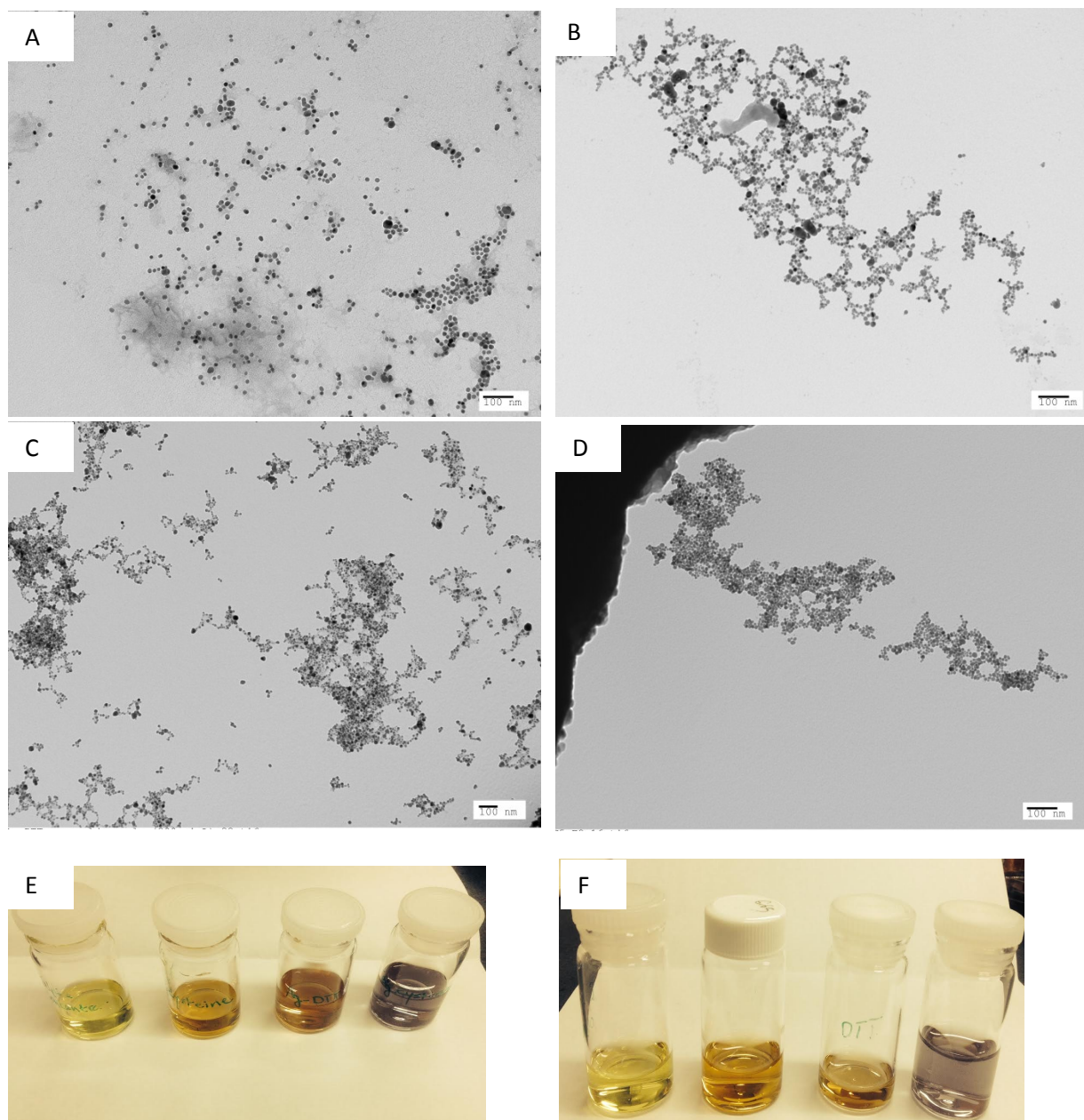


Figure SI-4. TEM micrographs of A) Ag-glycine after 7 days; B) Ag-cysteine after 5 days; C) Ag-DTT after 3 months; D) Ag-cysteamine after 8 days. E and F) Photographs of AgNPs on the day of synthesis and after 25 days, respectively (From left to right: Ag-glycine, Ag-cysteine, Ag-DTT and Ag-cysteamine).