

Electronic Supplementary Information for:

Large Kondo Effect in Assemblies of Au Nanoparticles Linked with Alkanedithiol Electron Bridges Nanoscales

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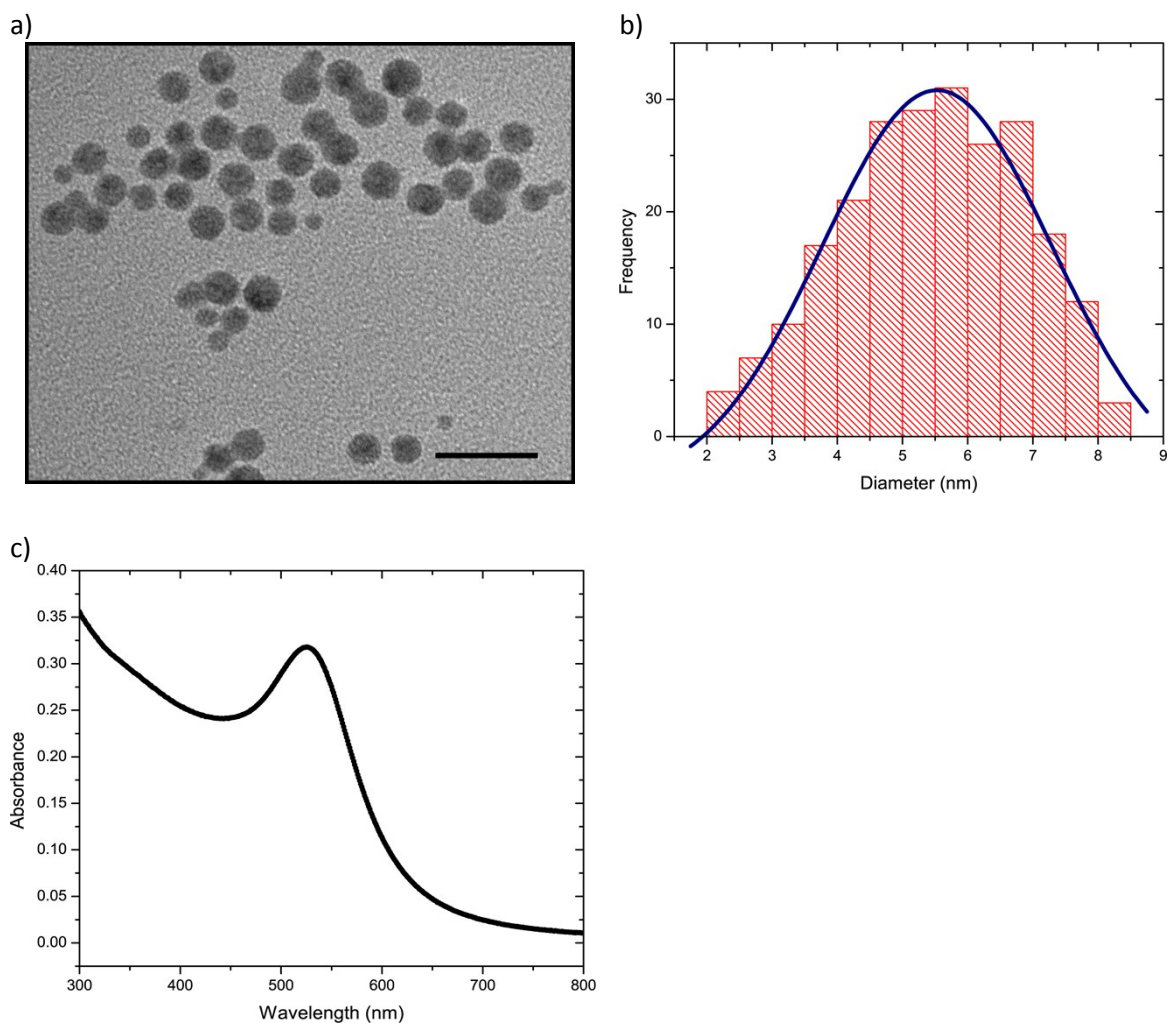


Fig. S1: Nanoparticle characterization. a) TEM image of nanoparticles. The scale bar corresponds to 20nm. b) Histogram of nanoparticle sizes. The average nanoparticle size is 5.5 ± 1.8 nm. c) UV-Vis absorption spectrum of a nanoparticle solution.

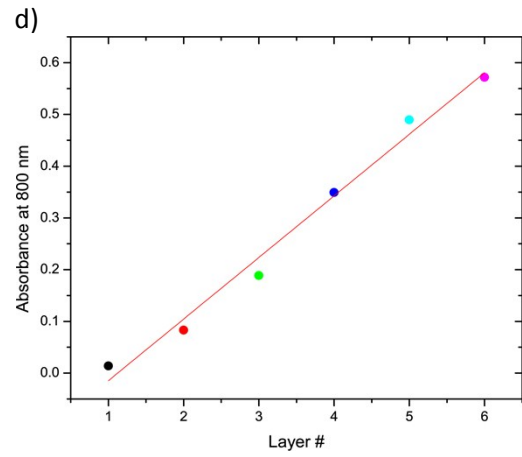
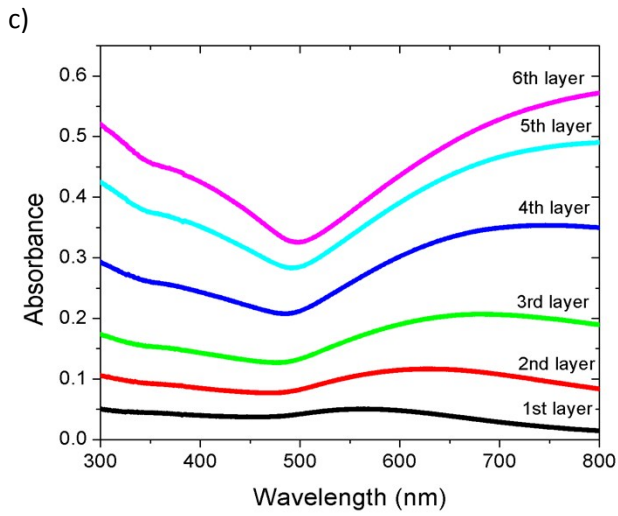
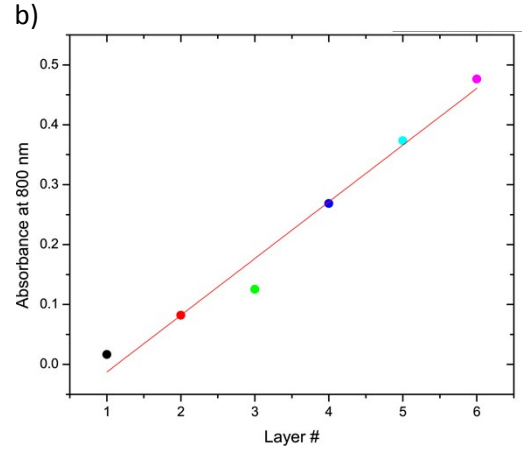
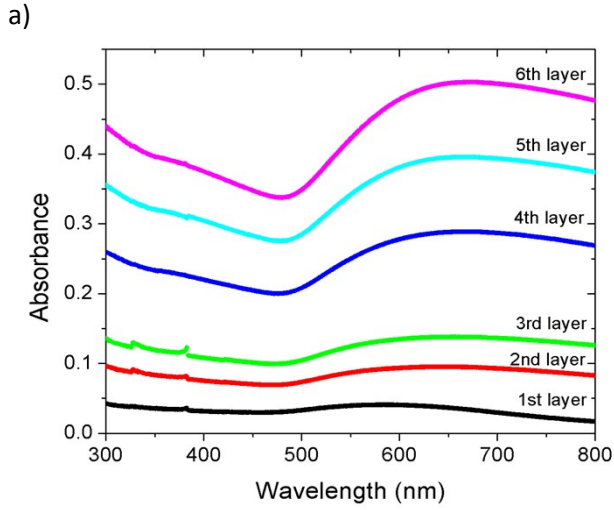
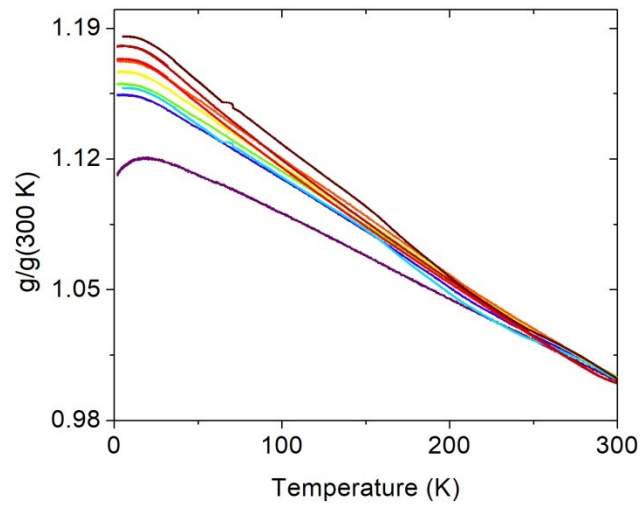


Fig. S2: UV-Vis absorption spectra and absorption at 800 nm with various number of nanoparticle/linker immersion cycles using 1,4 – butanedithiol (a, b) and 1, 4 butanediamine (c, d).

a)



b)

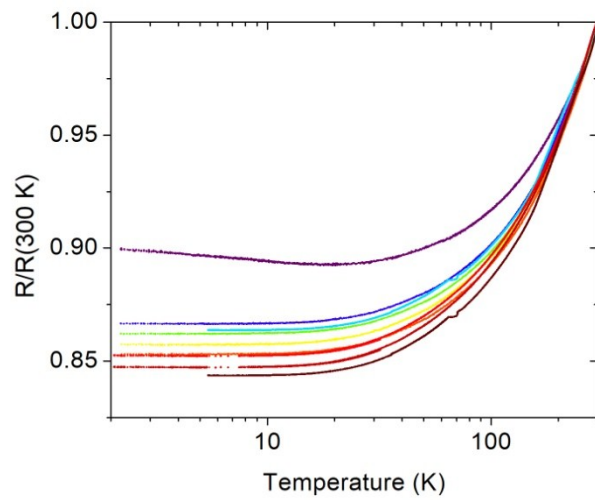


Fig. S3: a) Conductance vs. temperature and b) resistance vs. temperature on a log scale for metallic butanediamine-linked Au Nanoparticle Films.