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Supplementary information

Enhancing spectral shifts of plasmon-coupled noble metal nanoparticles for sensing applications

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Table S1. ssDNA probes used in DNA sensing assay

Capture	5'-HS-AAA AAA AAA GGT GGA TAA CGT CTT
Tag	5'-ACG CCT TCT TGT TGG AAA AAA AAA-SH
Target	5'-CCA ACA AGA AGG CGT AAG ACG TTA TCC ACC

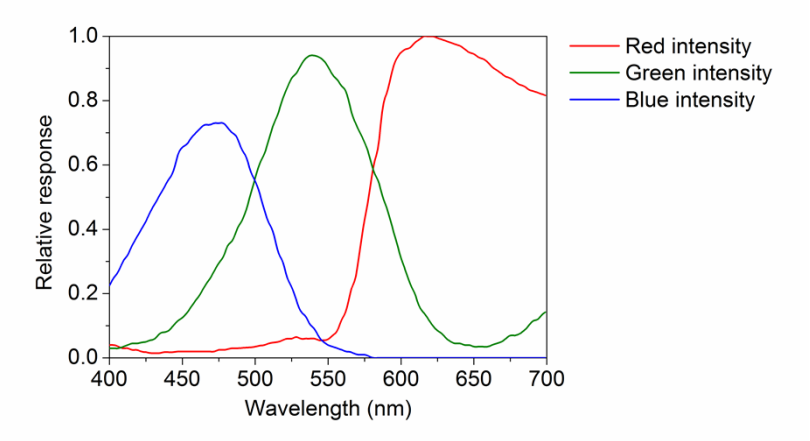

Figure S2. Relative intensities of the red, green and blue colour channels of the Zeiss Axiocam HRc camera.

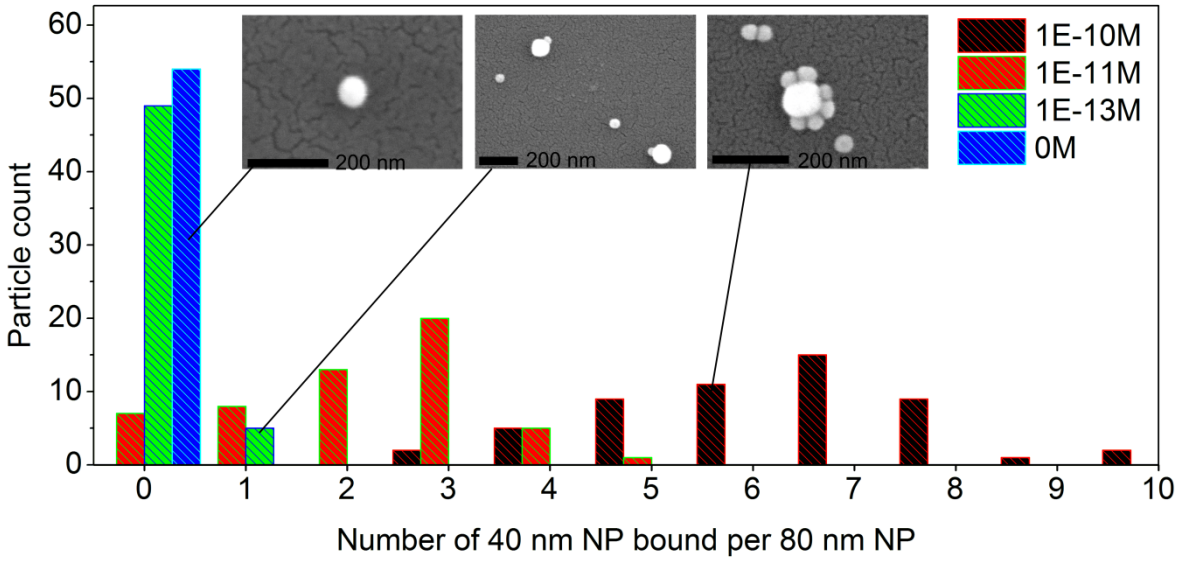

Figure S3. Histogram containing the number of 80 nm AuNPs which have bound 0, 1 or more 40 nm AuNPs. ~50 particles were counted at each target concentration. SEM figures show examples of particles found at each specific target concentration. Gaps between the small and large particles have decreased due to the effects of drying and capillary forces before SEM imaging.

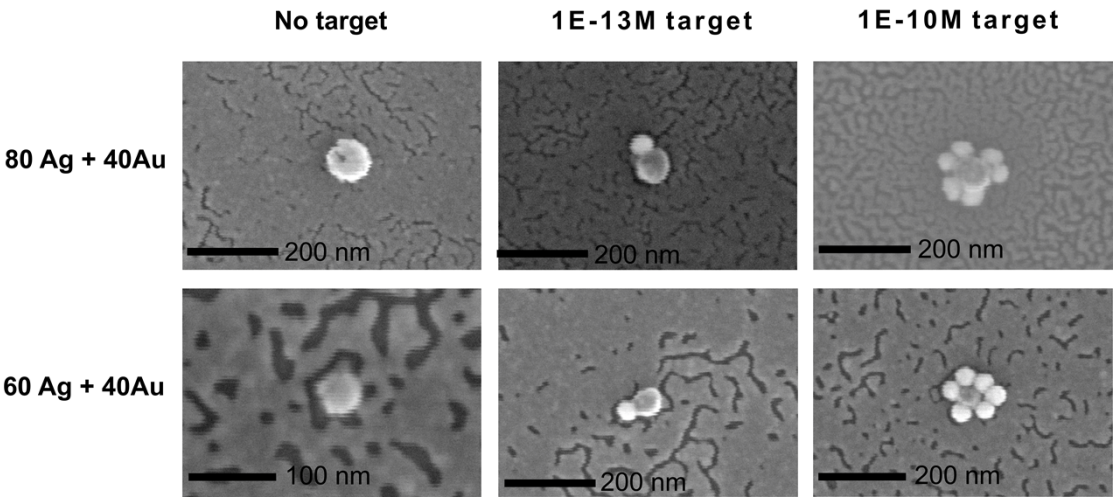

Figure S4. SEM images of single Ag particle or Ag-Au particle-complexes acquired as a function of the target concentration for both 80 nm Ag and 60 nm Ag.

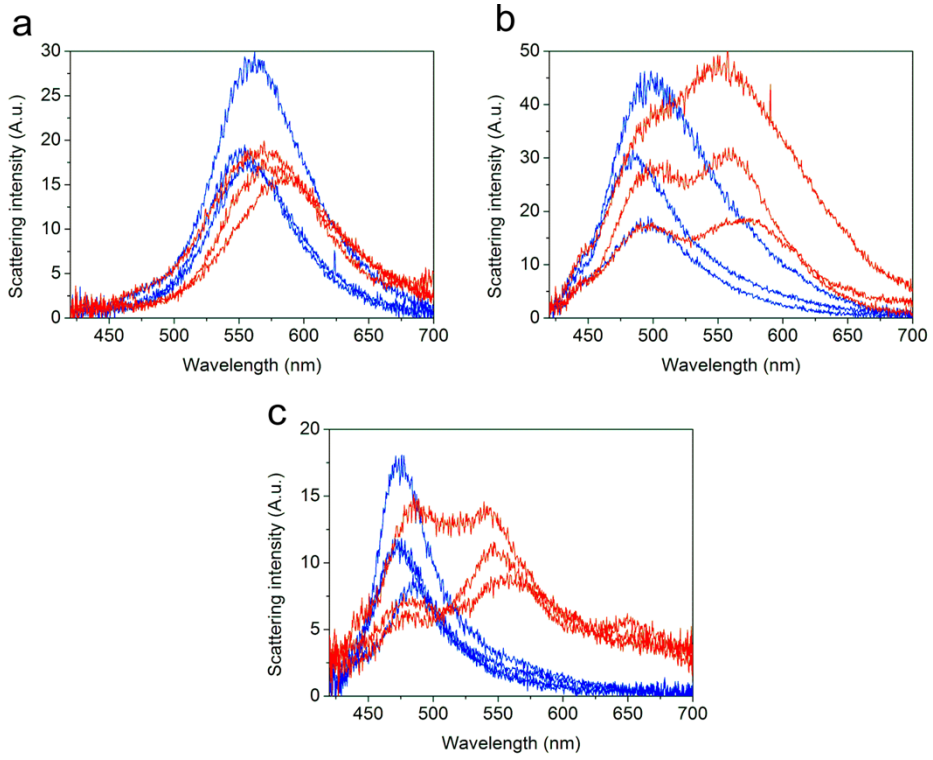

Figure S5. Raw measurement data of nanoparticle spectra. (a) 80Au-40Au, (b) 80Ag-40Au and (c) 60Ag-40Au. Blue lines denote singular particles. Red lines denote dimers.