

Supporting Information

Titration of Gold Nanoparticles in Phase Extraction

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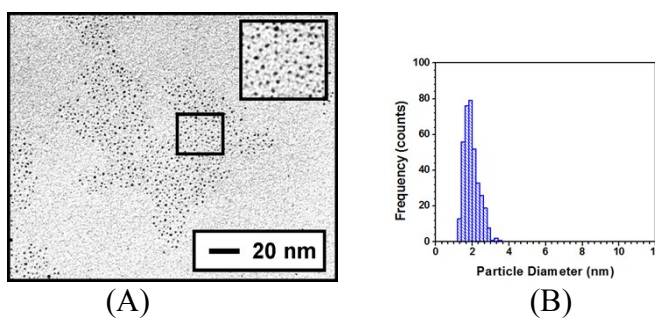


Fig. S1 TEM (A) and size distributions (B) for $\text{Au}_{2\text{nm}}(\text{DT})$ nanoparticles (2.0 ± 0.4 nm, RSD $\sim 20\%$).

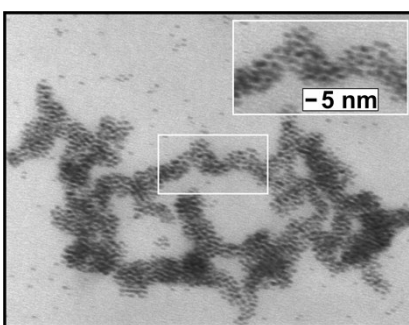


Fig. S2 TEM micrographs of $\text{Au}_{2\text{nm}}[(\text{DT})_{50}(\text{MUA}^-)_{50}]$.

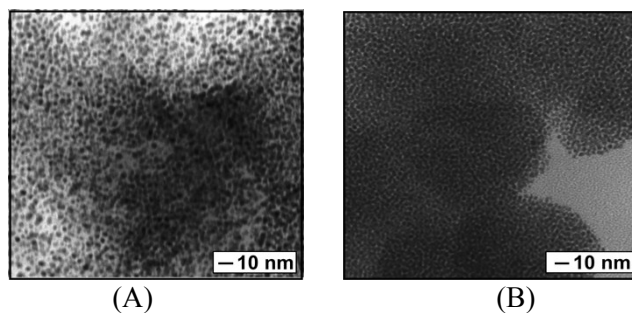


Fig. S3 TEM micrographs of (A) $\text{Au}_{2\text{nm}}[(\text{DT})_{50}(\text{MUA}^-)_{50}]$ and (B) $\text{Au}_{2\text{nm}}[(\text{DT})_{50}(\text{MUA}^-)_{50}](n\text{TOA}^+)$ after phase titration.

Table 1. Data from the determination of MUA ligand ion pairing in mixed monolayer $\text{Au}_{2\text{nm}}[(\text{DT})_{50}(\text{MUA}^-)_{50}]$ by TOA^+ .

Titration (Trial #)	^a $\text{Au}_{2\text{nm}}[(\text{DT})_{50}(\text{MUA}^-)_{50}]$ (μ moles)	^b TOA^+Br^- (μ moles)	^c % MUA in ligand shell
1	0.085	3.75	51.2
2	0.170	7.00	47.6
3	0.170	6.75	45.9

a) Calculated from the Au mass & the TEM-determined size; b) Determined the phase extraction; c) volumetric titration errors: $\pm 1\%$.