

SUPPORTING INFORMATION

FIGURE S1

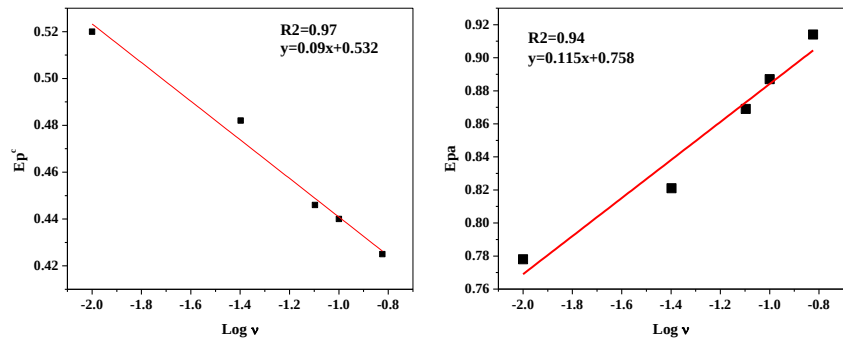


Fig S1: E_p Vs $\log v$ plots for anodic and cathodic peaks under UPD condition.

FIGURE S2

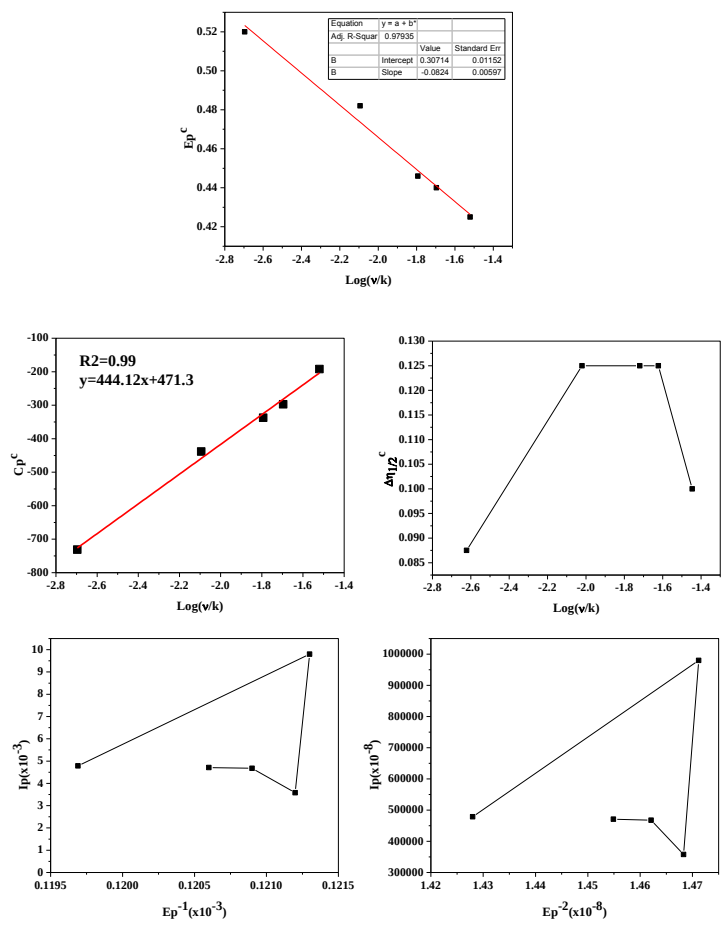


Fig S2: $I_p - E_p$ plots ie, I_p Vs E_p^{-1} and I_p Vs E_p^{-2}

FIGURE S3

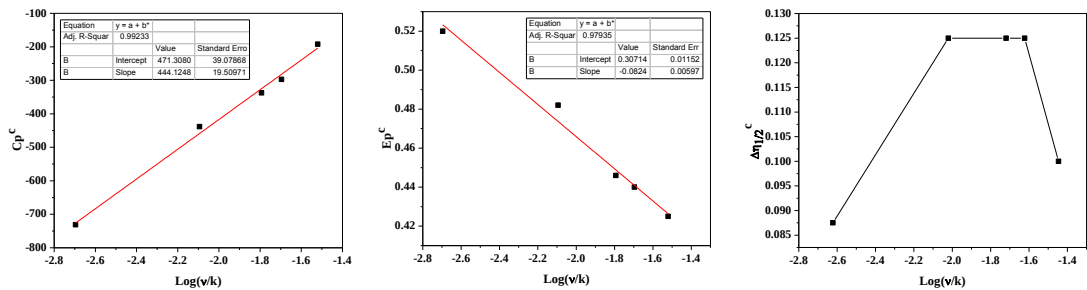


Fig S3: C_p^c , E_p^c , $\Delta\eta_{1/2}^c$ Vs $\log v$ plots for cathodic peaks under OPD conditions

FIGURE S4

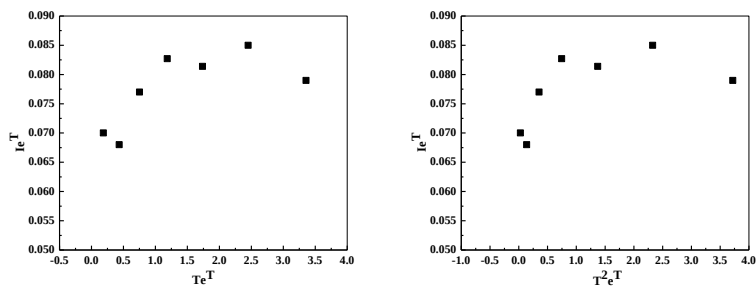


Fig S4 : I-T plots for UPD process ie $I(e^T)$ Vs $T(e^T)$ & $I(e^T)$ Vs $T^2(e^T)$

FIGURE S5

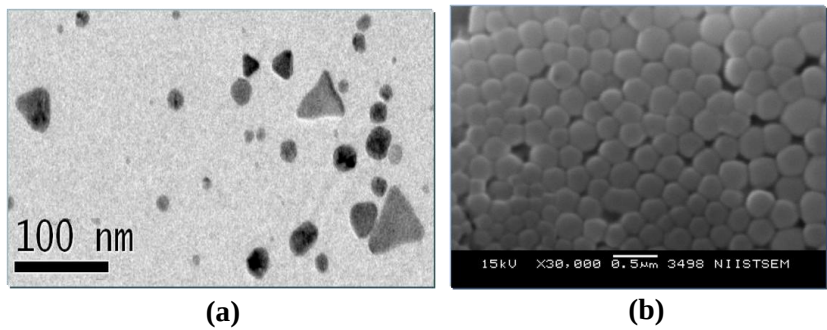


Fig S5: SEM images of potentiostatically synthesized Au atomic clusters from 50mM CTAB (a) and 50mM CTAB + 1mM cysteine (b) at 1.1V for 30 minutes (over potential dissolution-deposition region).

FIGURE S6

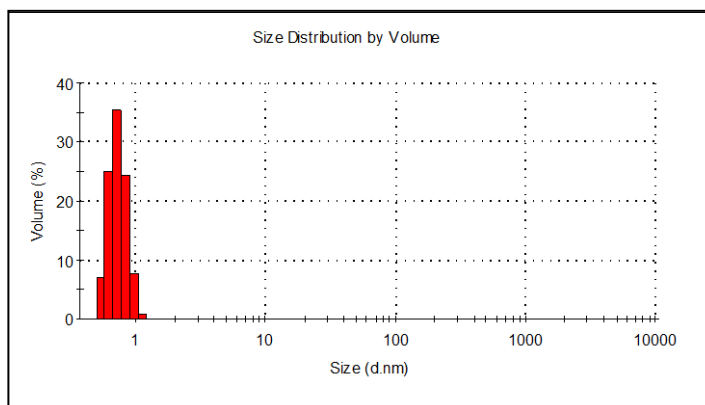


Fig S6: Dynamic light scattering studies of Au atomic clusters (dispersed in CTAB solution) synthesized from 50mM CTAB and 1mM cysteine under OPDD condition

FIGURE S7

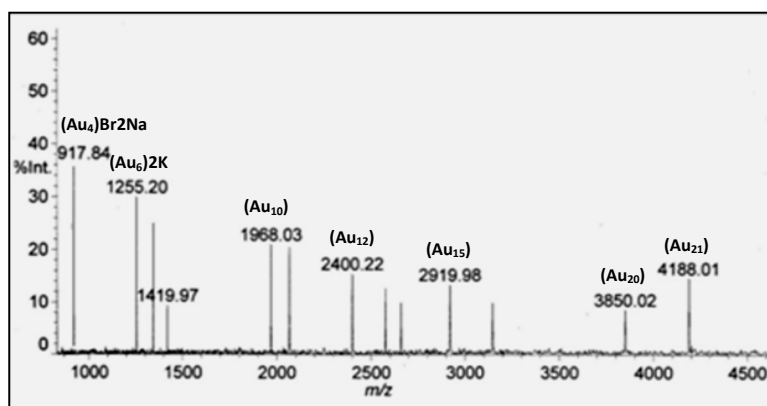


Fig S7: MALDI-TOF-MS spectra of Au clusters synthesized in presence of 50mM CTAB & 1 mM Cysteine under potentiostatic conditions at a potential of 1.1 V for 30 min.

FIGURE S8

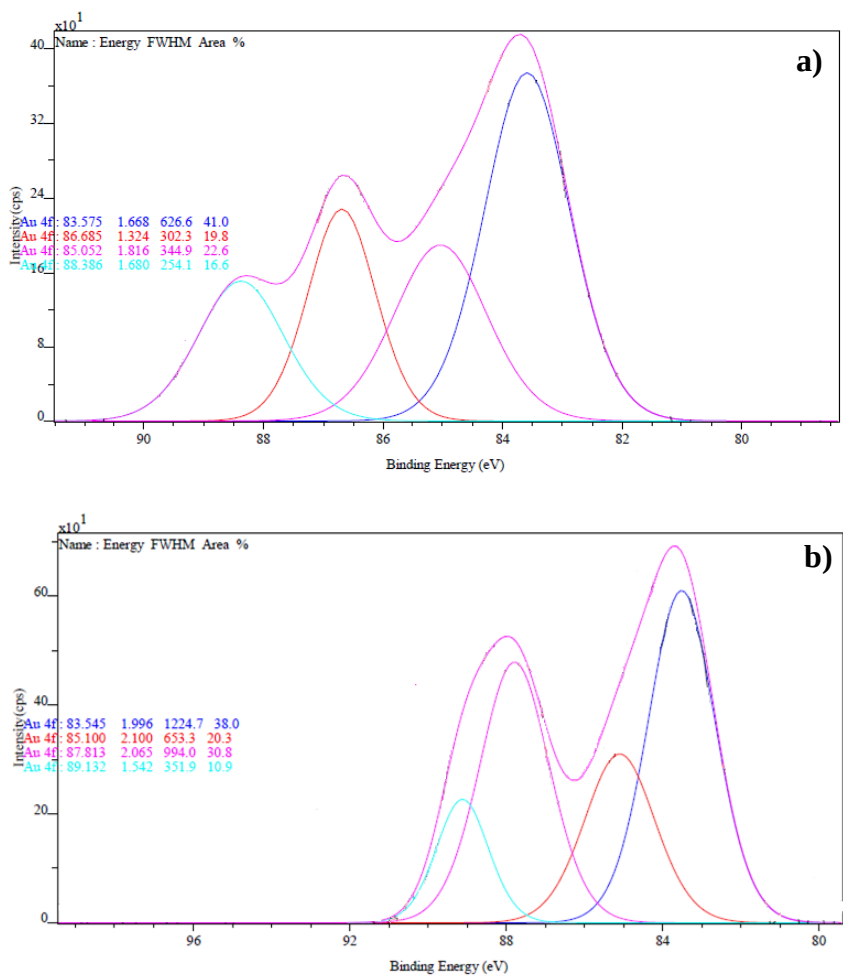


Fig S8: a) XPS spectra of Au clusters synthesized in presence of 50mM CTAB & 1 mM Cysteine under UPD condition b) OPD condition