

Figure S1. FT-Raman spectra recorded from the drop-cast films of crystal violet (1), crystal violet bound gold (2) and silver nanoparticles on silicon substrates.

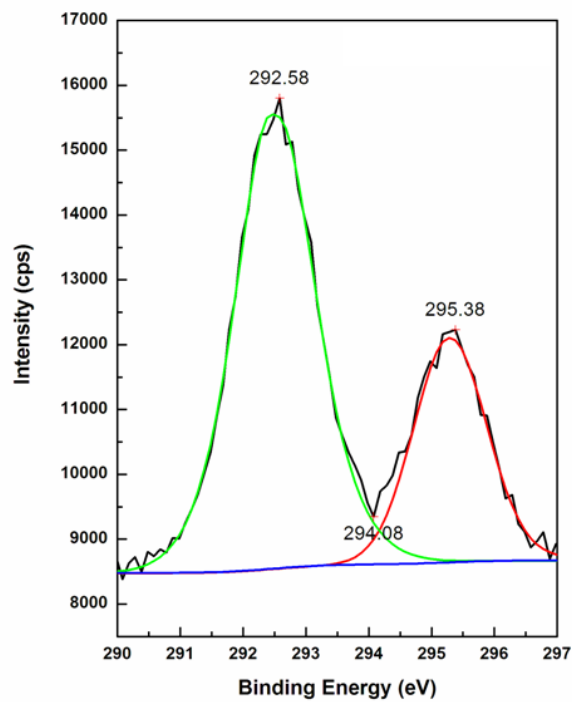


Figure S2. K2p core level spectra recorded from tyrosine reduced silver nanoparticles formation

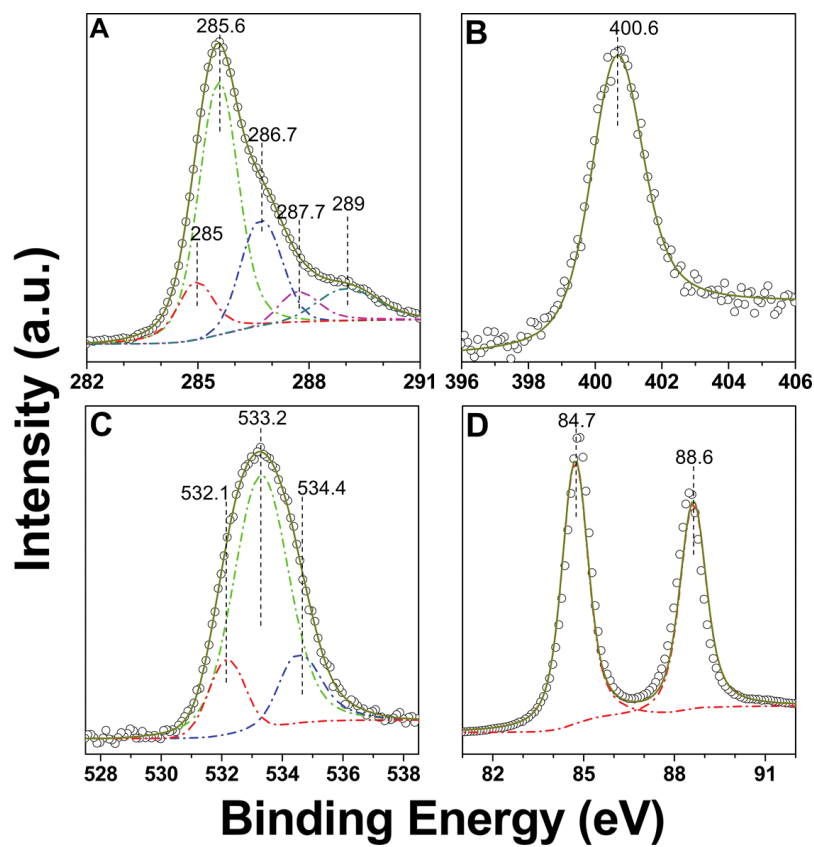


Figure S3. XPS spectra core level spectra (A) C 1s, (B) N 1s, (C) O 1s and (D) Au 4f of tyrosine reduced AuNPs on gold substrate.