

### Supporting Information

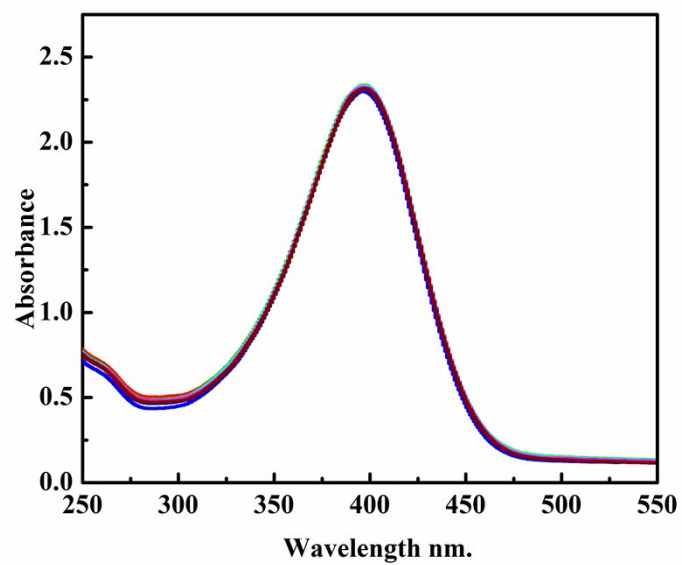


Fig. S1 UV-vis spectra of S-6-393

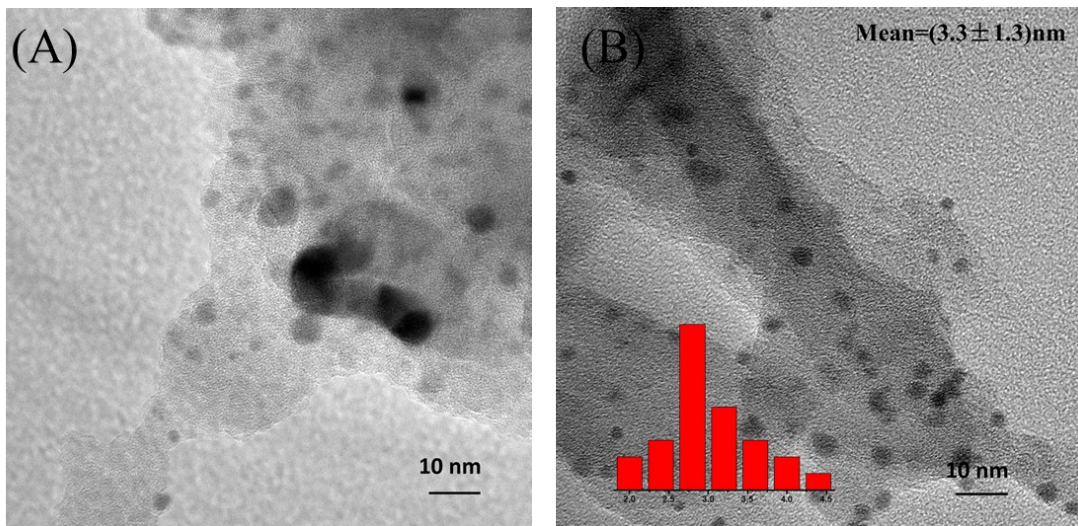


Fig. S2 TEM image of (A) NH<sub>2</sub>-S-6-393/Au used for 5 cycle tests, (B) NH<sub>2</sub>-S-6-393/Au calcined at 343 K