

Support Information

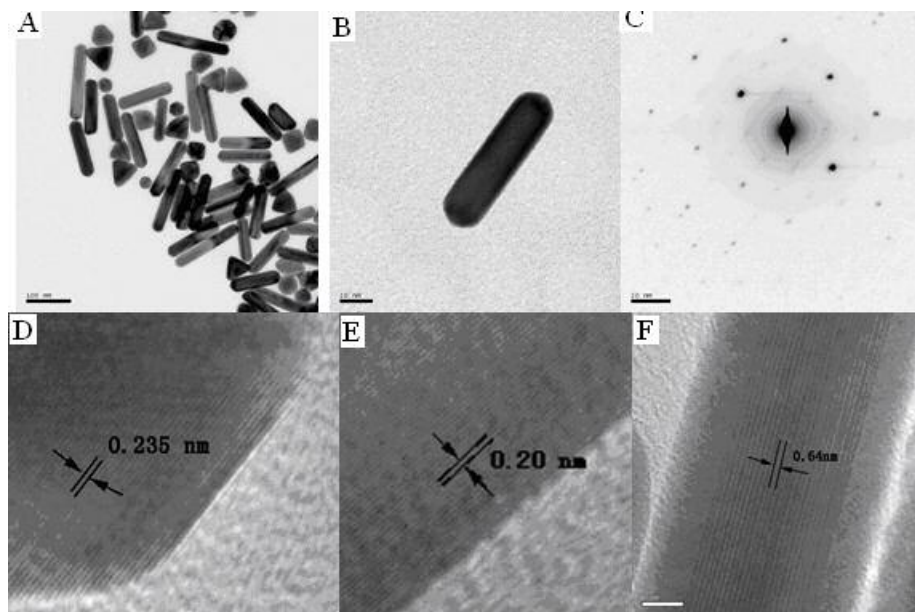


Figure S1. (A) TEM image of gold nanorods; (B) , (C) TEM image and the corresponding SAED pattern of an individual gold nanorod; (D,) HRTEM image of the nanorod at the top corner of the rod shown in (B); (E) HRTEM image of the nanorod at the side of the rod shown in (B).(F) The double diffraction reflection arising from a combination of the (200) and (220) spots.

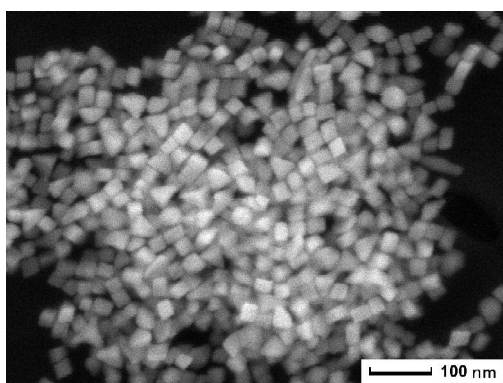


Figure S2. FESEM image of gold cuboid nanopartilces obtained at Cu^{2+} the concentration was 0.2 mM.

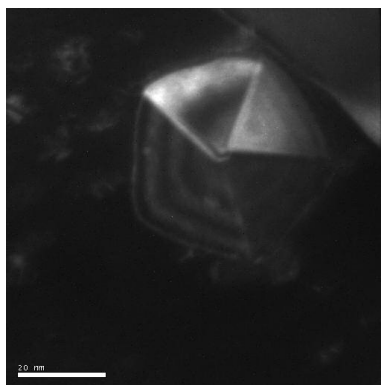


Figure S3. The dark-field TEM image of the Au decahedral nanoparticle obtained at Cu^{2+} the concentration was 1.6 mM.

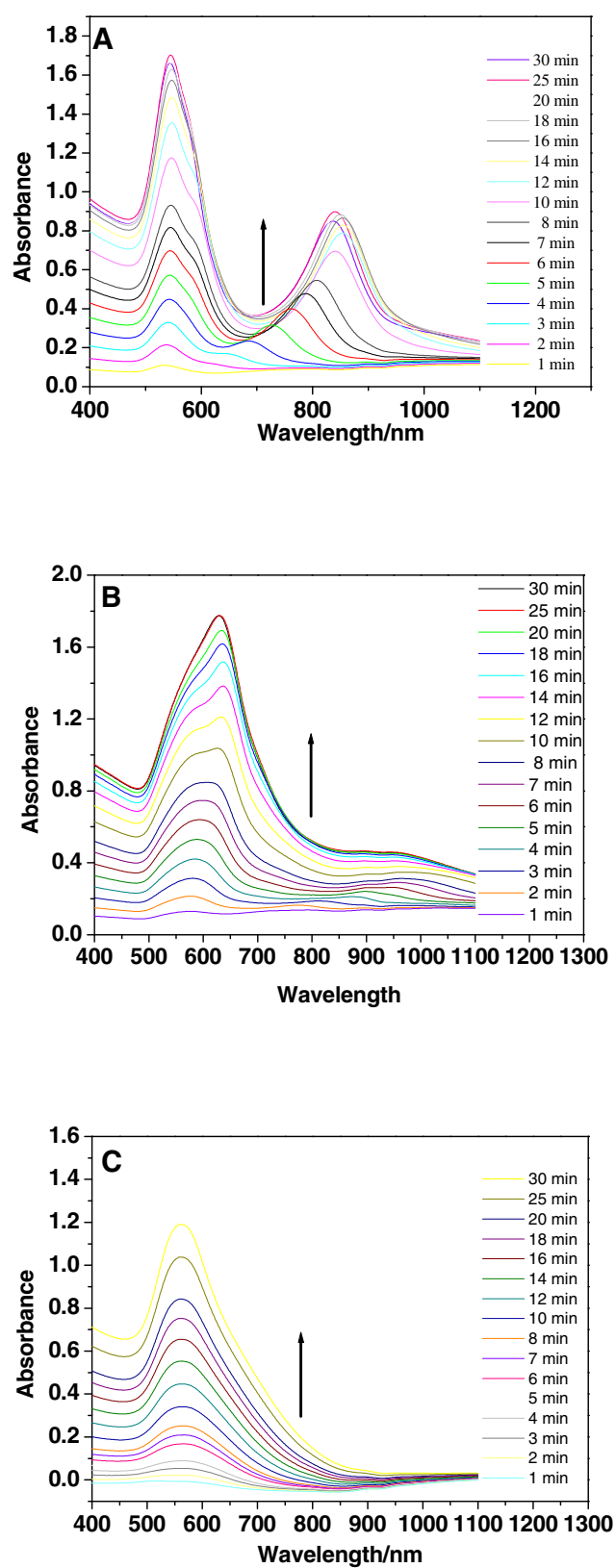


Figure S4. Vis-NIR absorption spectra of Au NPs solution change with time. The concentration of Cu^{2+} was (A) 0.0 mM, (B) 0.2 mM, (C) 1.6 mM.

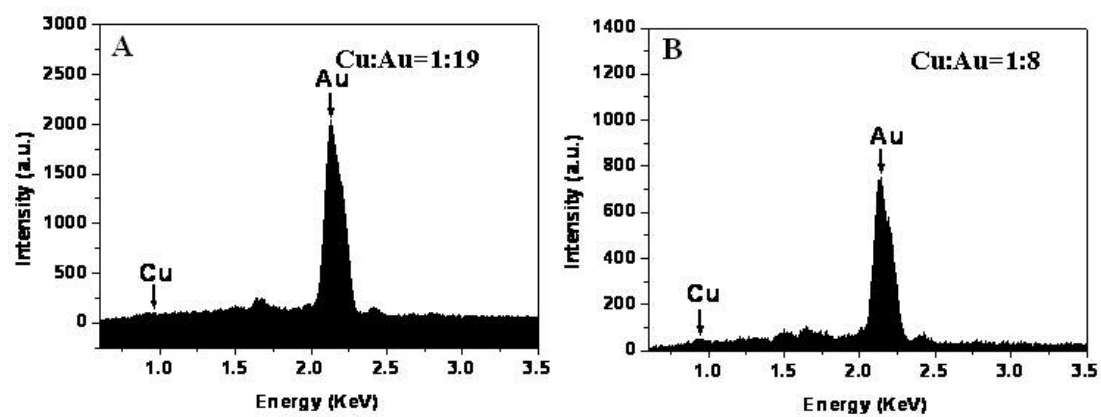


Figure S5. EDS images: (A) taken from the cuboid shown in figure 2A and (B) taken from the decahedron shown in figure 3A.