

Supporting Information

Stability and Binding Interaction of Bilirubin on Gold Nano- surface: Steady State Fluorescence and FT-IR Investigation

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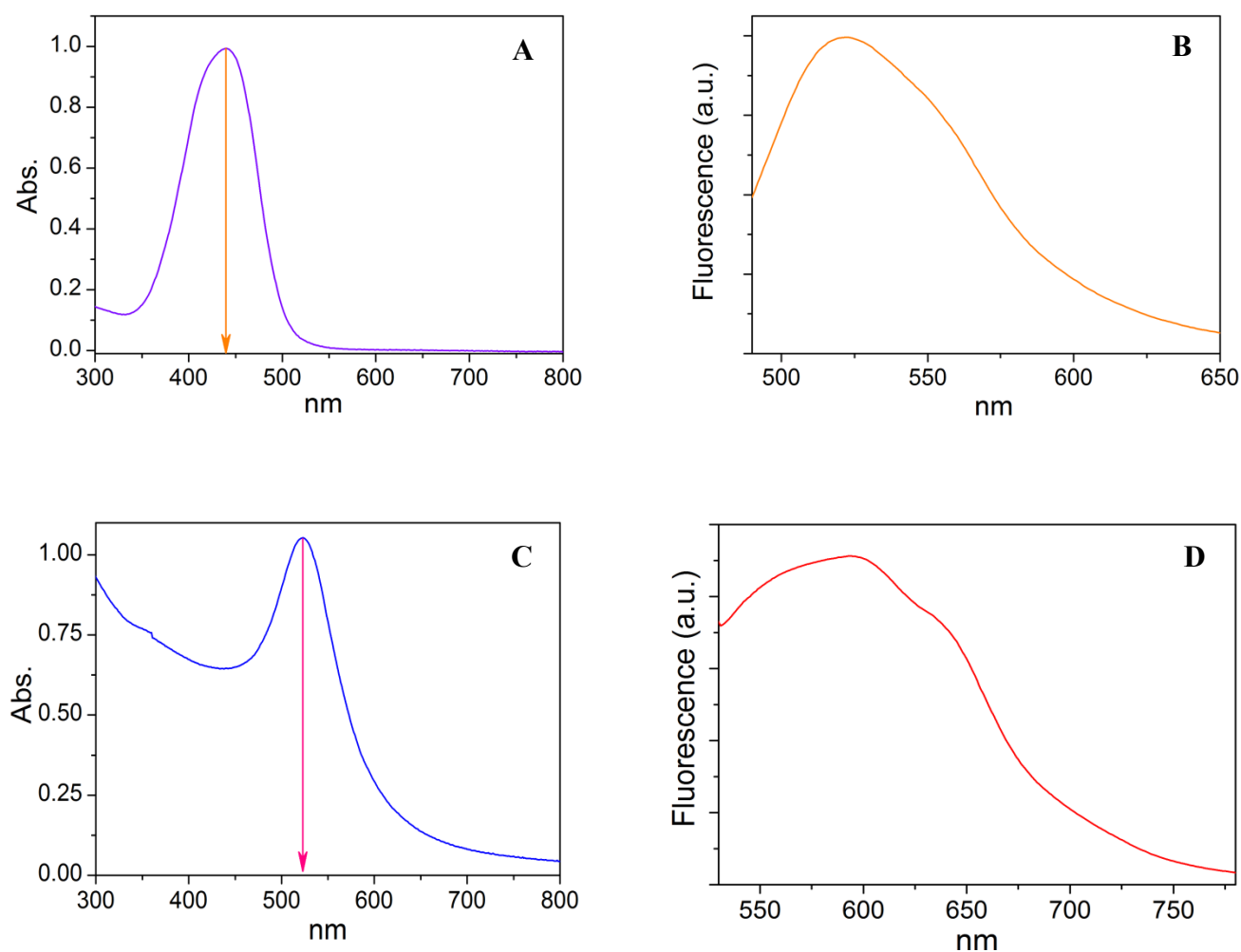


Figure S1: Absorption and fluorescence spectra of BR and AuBR in aqueous solution. (A) Absorption spectra of bilirubin ($18.7 \mu\text{M}$) in 10 mM phosphate buffer at pH 9.0. (B) Fluorescence spectra of bilirubin in the same buffer solution excited at 470 nm with slit width 5 nm each. (C) Absorption spectra of AuBR in water suspension. the particles were produced at pH 9.0 as discussed in the main manuscript. The particle was washed with milli-Q water prior to record the spectra. (D) Fluorescence spectra of AuBR and experiment condition was similar to the previous measurement.

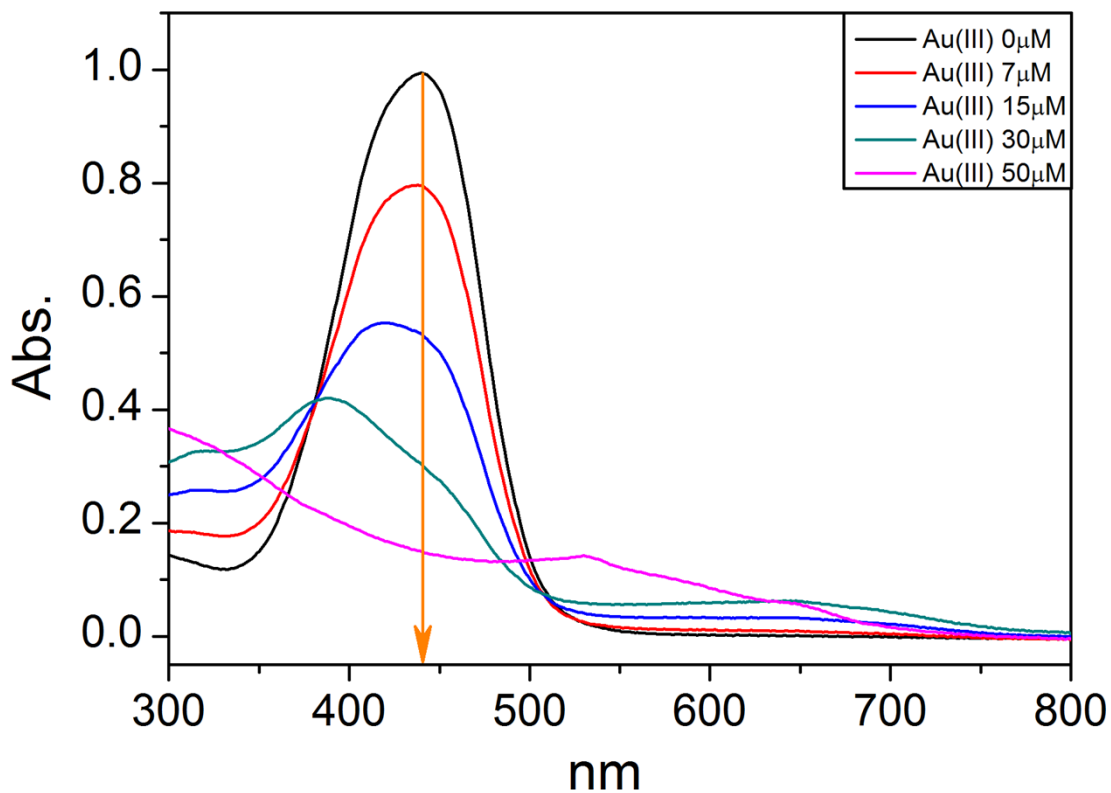


Figure S2: UV-Vis spectra of bilirubin ($18.75 \mu\text{M}$) in phosphate buffer (10mM) at pH 9.0 at in the presence of different concentration Au (III) ion, spectra was collected in 2 minute interval after addition of Au (III) ion solution. The absorption peak was decreasing with the increase of Au (III) ion concentration.