

Supporting Information

Colorimetric and fluorescent Detection for TNT and 4-Nitrophenol by BSA Au nanoclusters

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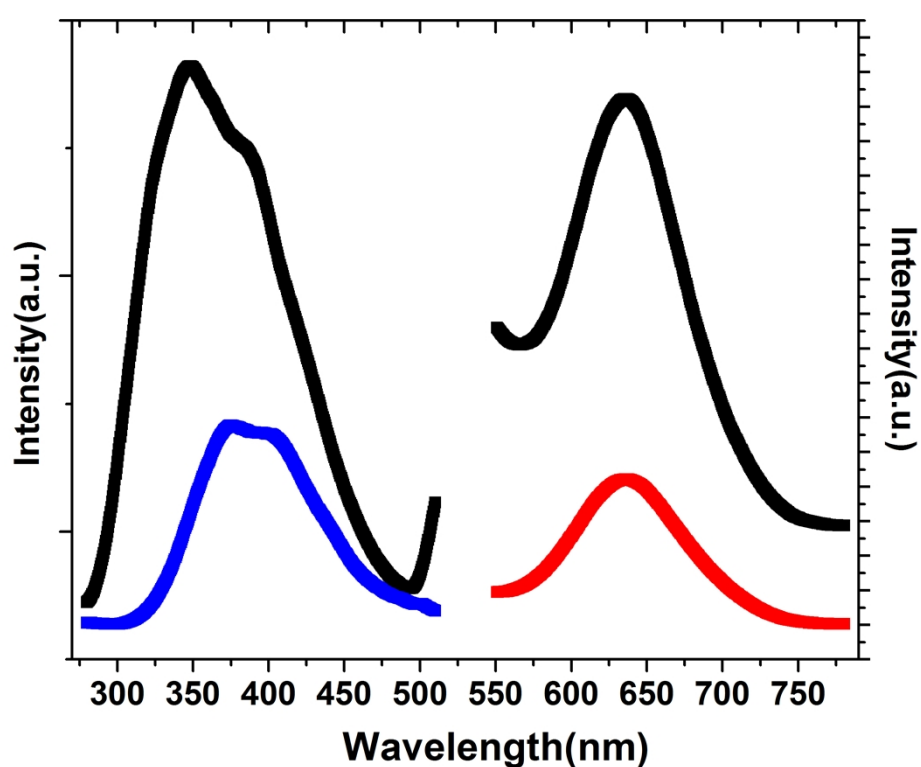


Fig. S1. The fluorescence emissions of BSA Au Nanoclusters excited at 260 nm (blue) and 470 nm (red), respectively.

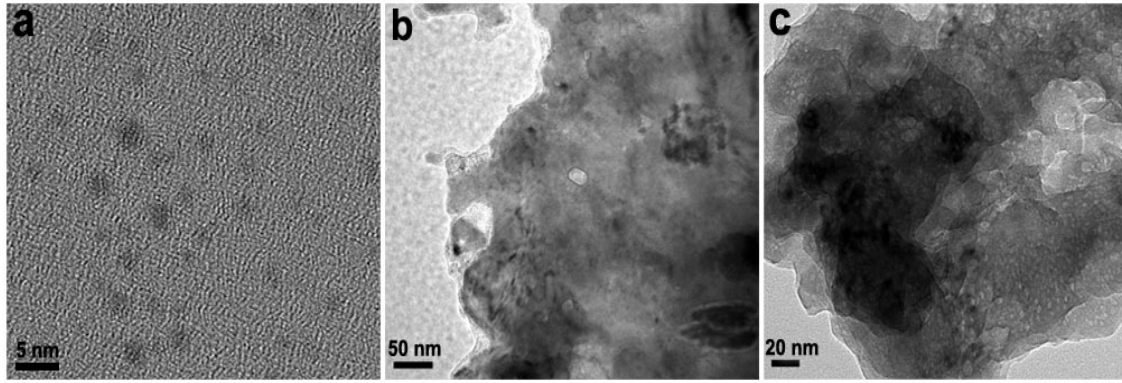


Fig. S2. TEM image of BSA Au-NCs (a) as prepared and after addition of (b) TNT (c) 4-NP.

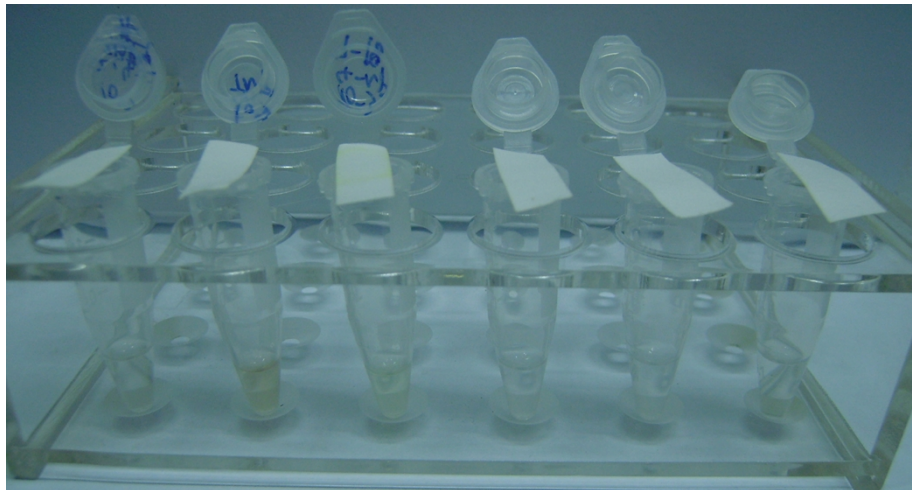


Fig. S3. Image of experiment of detection for nitroaromatics by BSA Au-NCs test papers

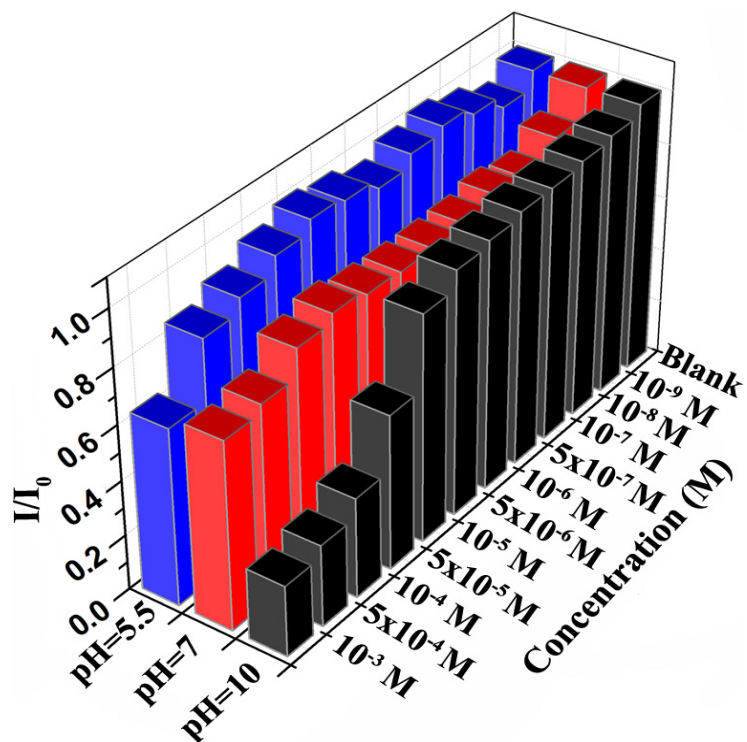


Fig. S4. The values (I/I_0) of BSA Au-NCs (prepared at pH values was 5.5, 7 and 10, respectively) with addition of TNT (10^{-3} - 10^{-9} M).

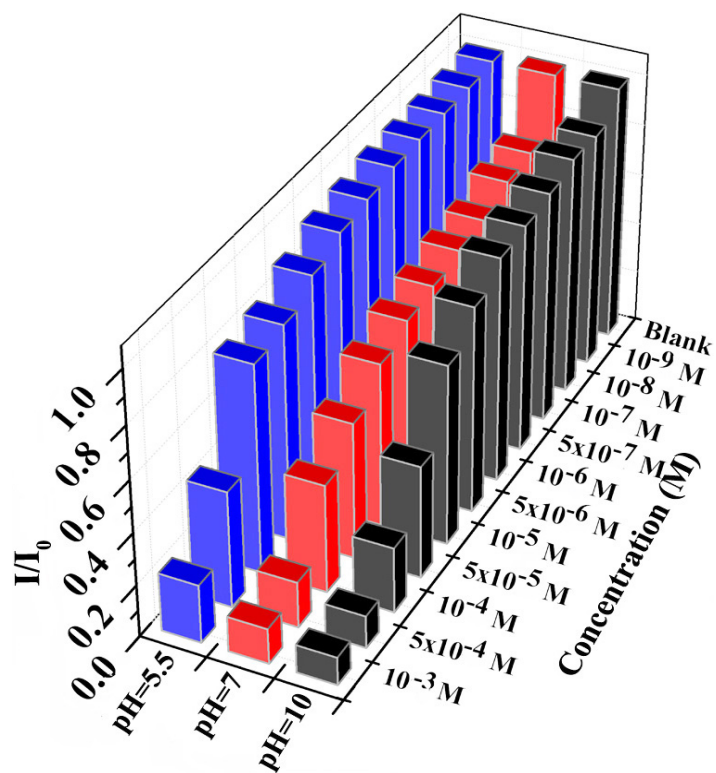


Fig. S5. The values (I/I_0) of BSA Au-NCs (prepared at pH values was 5.5, 7 and 10, respectively) with addition of 4-NP (10^{-3} - 10^{-9} M).

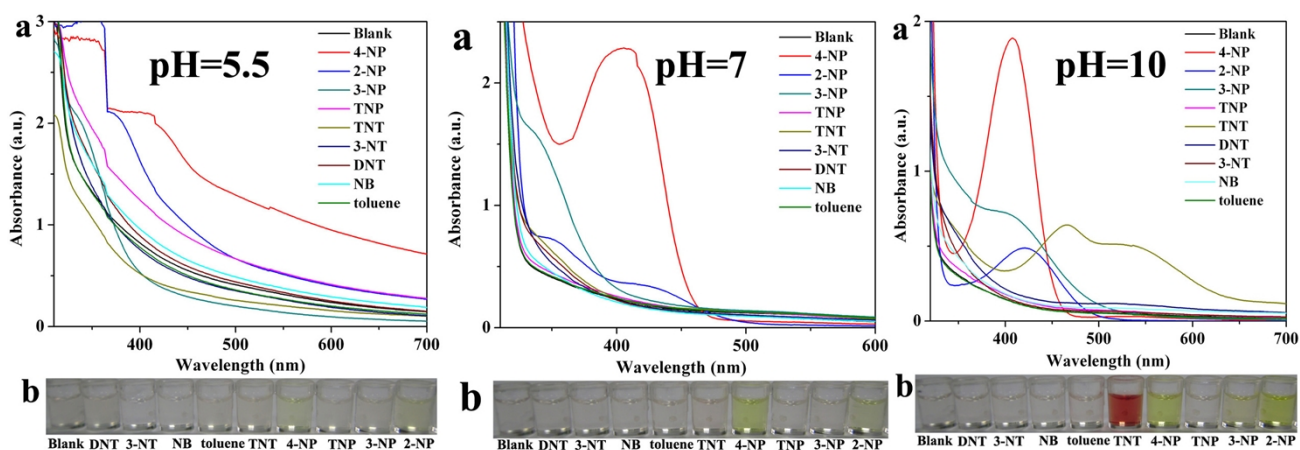


Fig. S6. (a) UV-vis absorption spectra of BSA Au-NCs in presence of different nitroaromatic compounds at different pH values. (b) Photographs of the different explosives at different pH values under visible light.

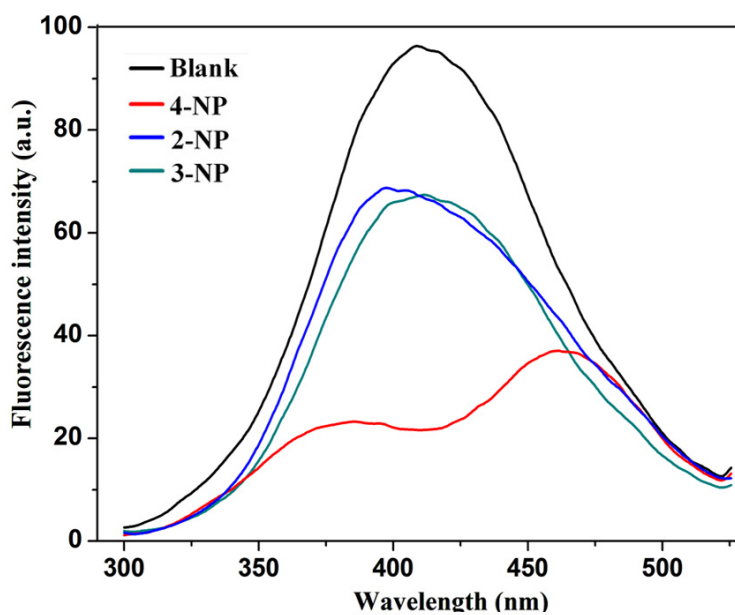


Fig. S7. The fluorescence emission of BSA Au-NCs reacted with 10⁻⁴ M of 2-NP, 3-NP and 4-NP, respectively.