Supporting Information



Fig. S1 illustration of IR spectra of AgNPs (green color), AgNPs/PABA (blue color), and AgNPs/PABA+NO₂- (red color).



Fig. S2 illustration of XRD spectra of AgNPs (green color), AgNPs/PABA (blue color), and AgNPs/PABA+NO₂- (red color).



Fig. S3 Particle size calculation of AgNPs synthesized and stabilized by AHNDMS (A), Particle size calculation of AgNPs functionalized with PABA (B), Particle size calculation of aggregated AgNPs because of the presence of NO₂⁻ (C).



Fig. S4 (A) Cyclic voltammetry of pure AHNDMS (a), AgNPs synthesized and stabilized by AHNDMS (b), AgNPs functionalized with PABA (c) and aggregated AgNPs because of the presence of $NO_2^{-}(d)$. (B) Differential pulse voltammetry of pure AHNDMS (a), AgNPs synthesized and stabilized by AHNDMS (b), AgNPs functionalized with PABA (c) and aggregated AgNPs because of the presence of $NO_2^{-}(d)$.



Fig. S5 illustration of optimizing condition of the proposed method (A) effect of different pH solutions, (B) effect of time, (C) effect of PABA concentration and (D) effect of hydrochloric acid concentration.