Electronic Supplementary Information

A Simple, Fast, and Sensitive Colorimetric Assay for Visual Detection of Berberine in Human Plasma by NaHSO₄ Optimized Gold Nanoparticles

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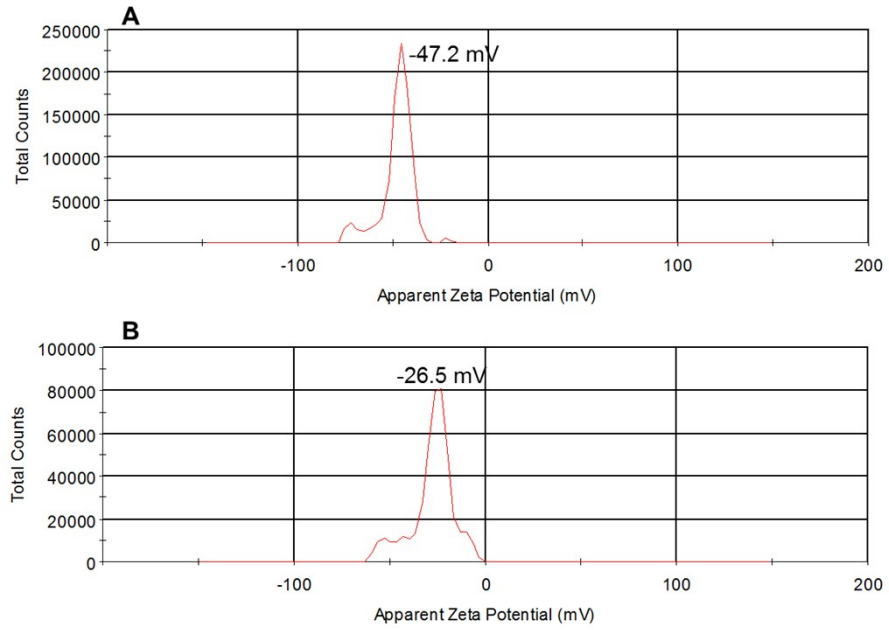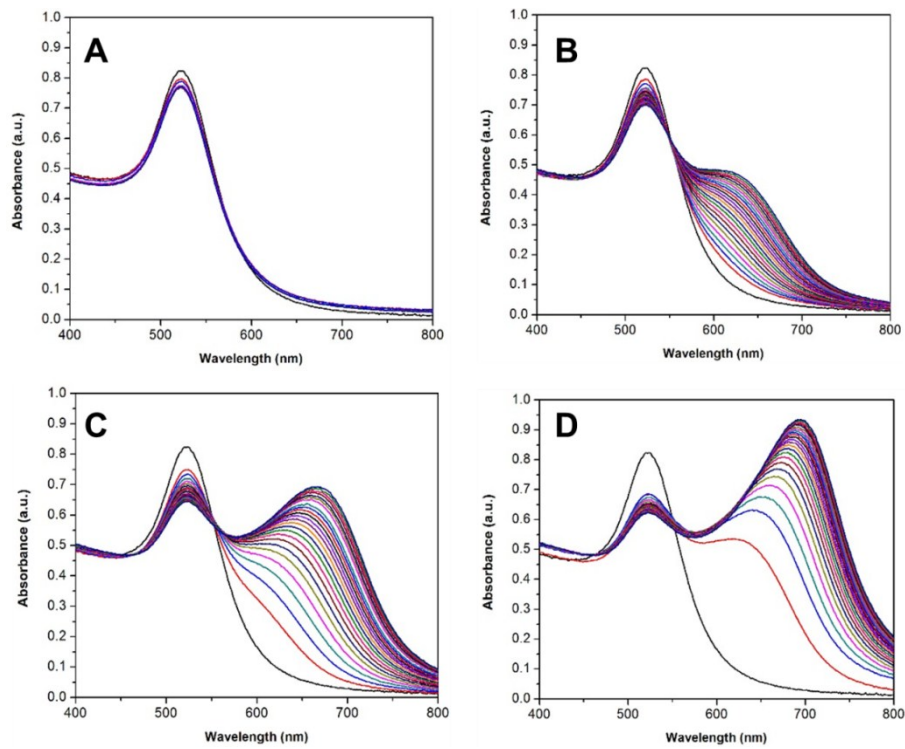**Limit of Detection (LOD) Measurements.** The LOD was calculated using the below equation: LOD= 3SD/S. Where "SD" is the standard deviation of the blank, "S" is the slope of the calibration curve ($Y = 0.0609X + 0.0056$). Herein the SD is 0.001308, so the LOD is 0.06 μg/mL.

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2   Figure S1. Zeta potential of AuNPs (A) before and (B) after the addition of 5 μM berberine.
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5   Figure S2. Time course of the aggregation of AuNPs as induced by (A) 1.0 μM, (B) 2.0 μM,

6   (C) 2.5 μM and (D) 3.0 μM of berberine monitored with UV-vis absorbance spectra at an

7   interval of 2.5 min.