Electronic supplementary information (ESI)

Fluorescence quenching-based assay of bisphenol A by using functionalized silica nanoparticles and nanogold on competitive immunoassay

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Figure S1. UV-Visible spectrum of colloidal gold stoste and Ag-AuNPs
Fig. S2. TEM images of the coating antigen-AuNPs
Fig. S3. SEM images of the dual-coded silica nanoparticles
Figure S4. The absorbance of colloidal gold with different concentration of coating antigen from 0.4 mg/mL to 1.4 mg/mL at 580 nm.
Figure S5. Fluorescence quenching efficiency with different content of DNA: $e = (1 - \frac{F_{\text{DA}}}{F_D}) \times 100\%$, $F_{\text{DA}}$ represent the fluorescence intensity of donor and accepter exist at the same time; $F_D$ represent the fluorescence intensity of donor only.
Figure S6. Effects of pH values (a), selectivity (b) and storage time (c) for BPA detection.