Electronic Supplementary Material (ESI) for Analytical Methods.

Supporting Information

for

A sensitive three-signal assay for the determination of PFOS based on the interaction with Nile blue A

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Fig.S1 Photograph of NBA in the presence of various concentrations of PFOS from 0 μmol/L to 3.2 μmol/L; NBA, 0.3 μmol/L; pH, 3.3.

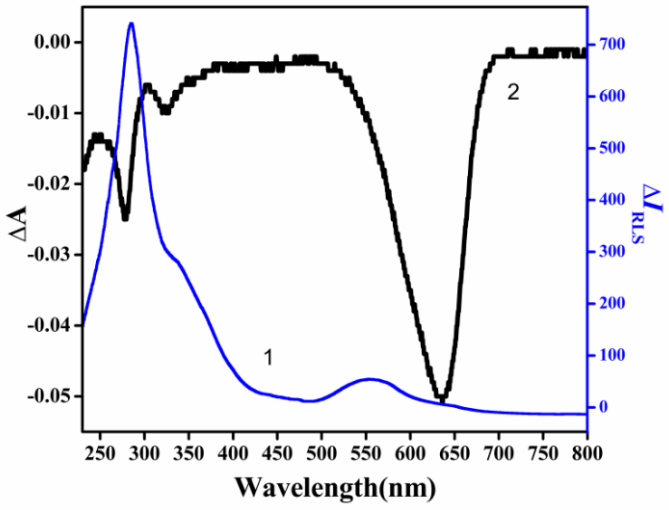

Fig. S2 (1) Differential RLS intensity. (2) Differential absorbance intensity of NBA towards PFOS. PFOS, 4.0 μmol/L; NBA, 0.3 μmol/L; pH, 3.3.

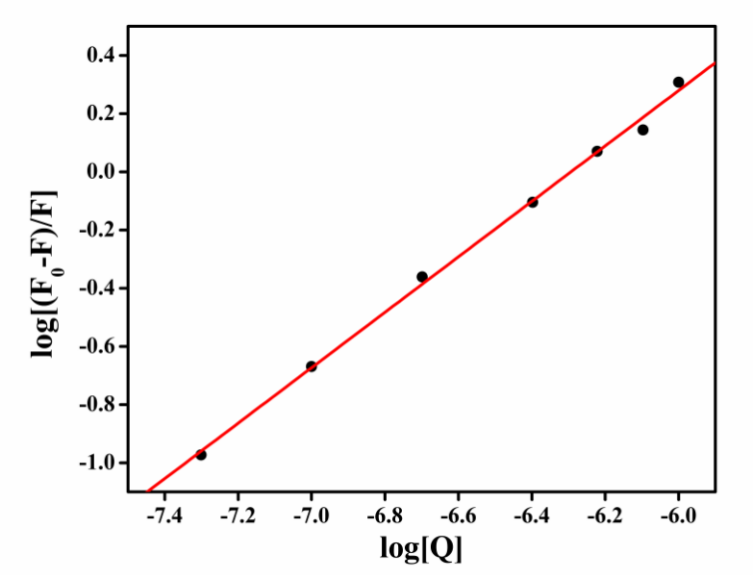

Fig. S3 Double-log plots of PFOS quenching NBA fluorescence.

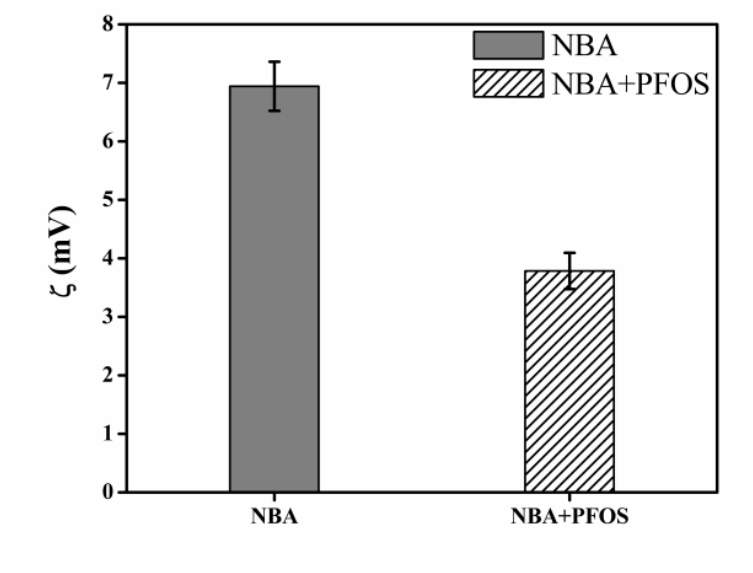

Fig. S4 Zeta potential of NBA and NBA-PFOS in optimum conditions.

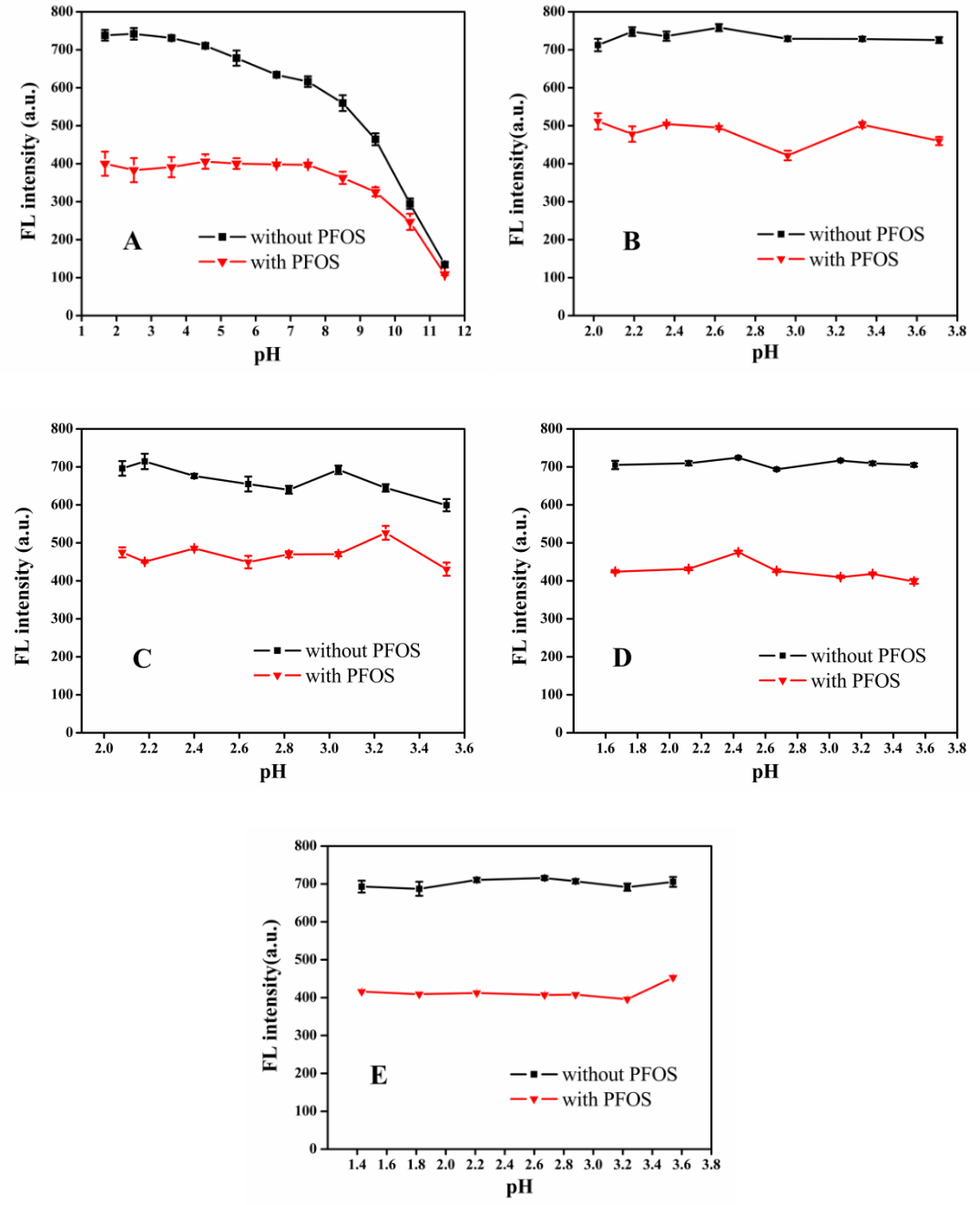

Fig. S5 Effect of pH on the fluorescence intensity of NBA in the absence and presence of PFOS. Concentration: PFOS, 1.0 μmol/L; NBA, 0.3 μmol/L; pH, 3.3. (A) BR. (B) Sodium tartaric-tartaric. (C) PHP-HCl. (D) Sodium citrate-HCl. (E) Glycine-HCl.

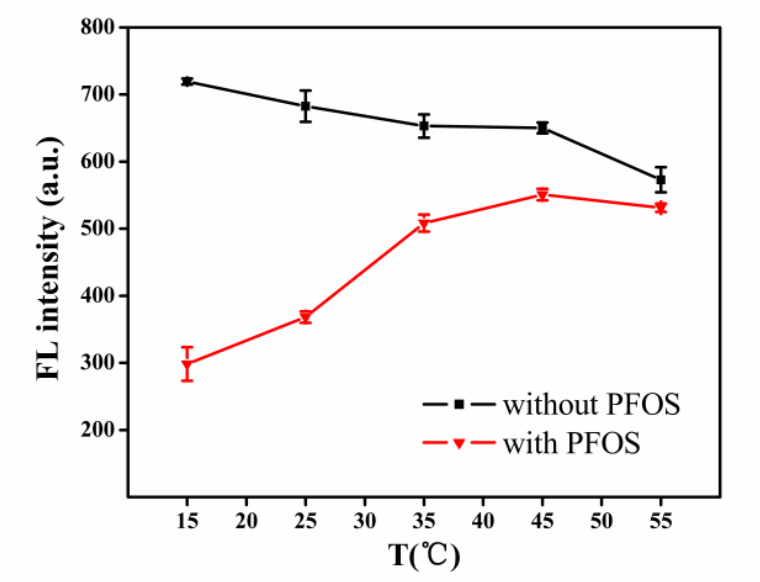

Fig. S6 Effect of temperature on the fluorescence intensity of NBA in the absence and presence of PFOS. Concentration: PFOS, 1.0 μmol/L; NBA, 0.3 μmol/L; pH, 3.3.

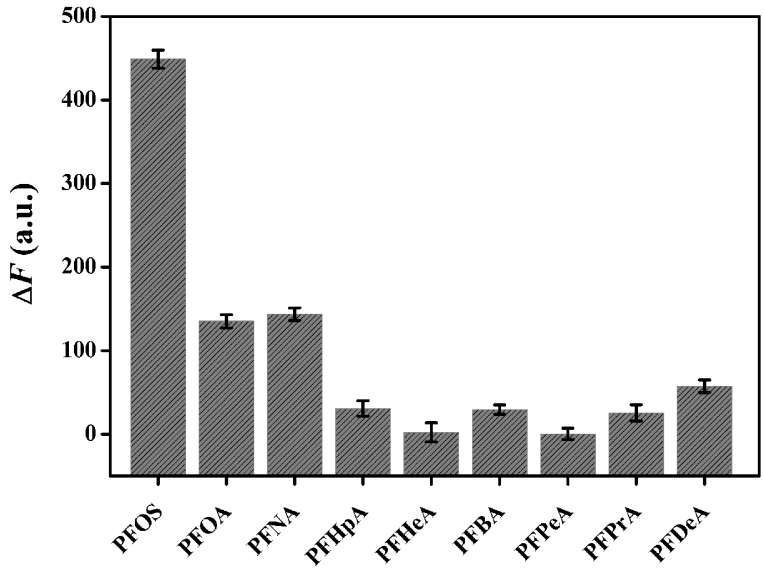

Fig. S7 The fluorescence intensity decreased value ΔF ($F_0 - F$) of NBA towards various perfluorinated compounds, respectively. PFCs, 1.0 μmol/L, NBA, 0.3 μmol/L; pH, 3.3.

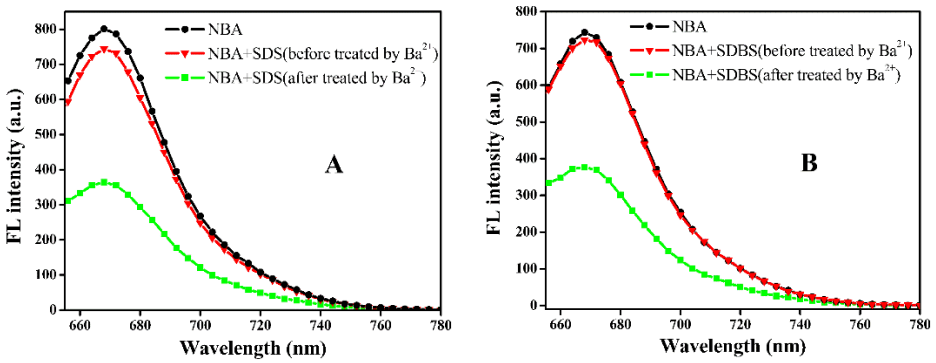

Fig. S8 Fluorescence intensity of NBA/PFOS, (A) the mixture of NBA/PFOS and SDS before and after treated by Ba^{2+}, (B) the mixture of NBA/PFOS and SDBS before and after treated by Ba^{2+}. Concentration: Ba^{2+}, 500.0 μmol/L; SDBS, 1.0 μmol/L; SDS, 1.0 μmol/L. pH, 3.3.