

Supporting Information

for

Highly sensitive and selective detection of Perfluorooctane

Sulfonate based on Janus Green B resonance light scattering

method

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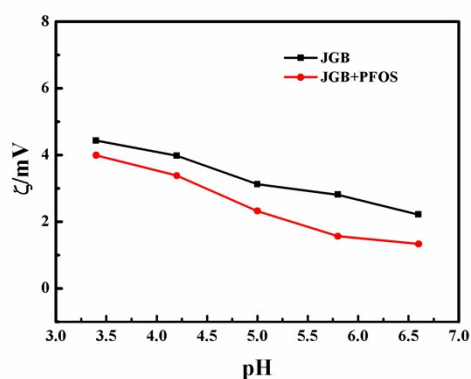


Fig. S1 Zeta potential of JGB and JGB-PFOS in different pH.

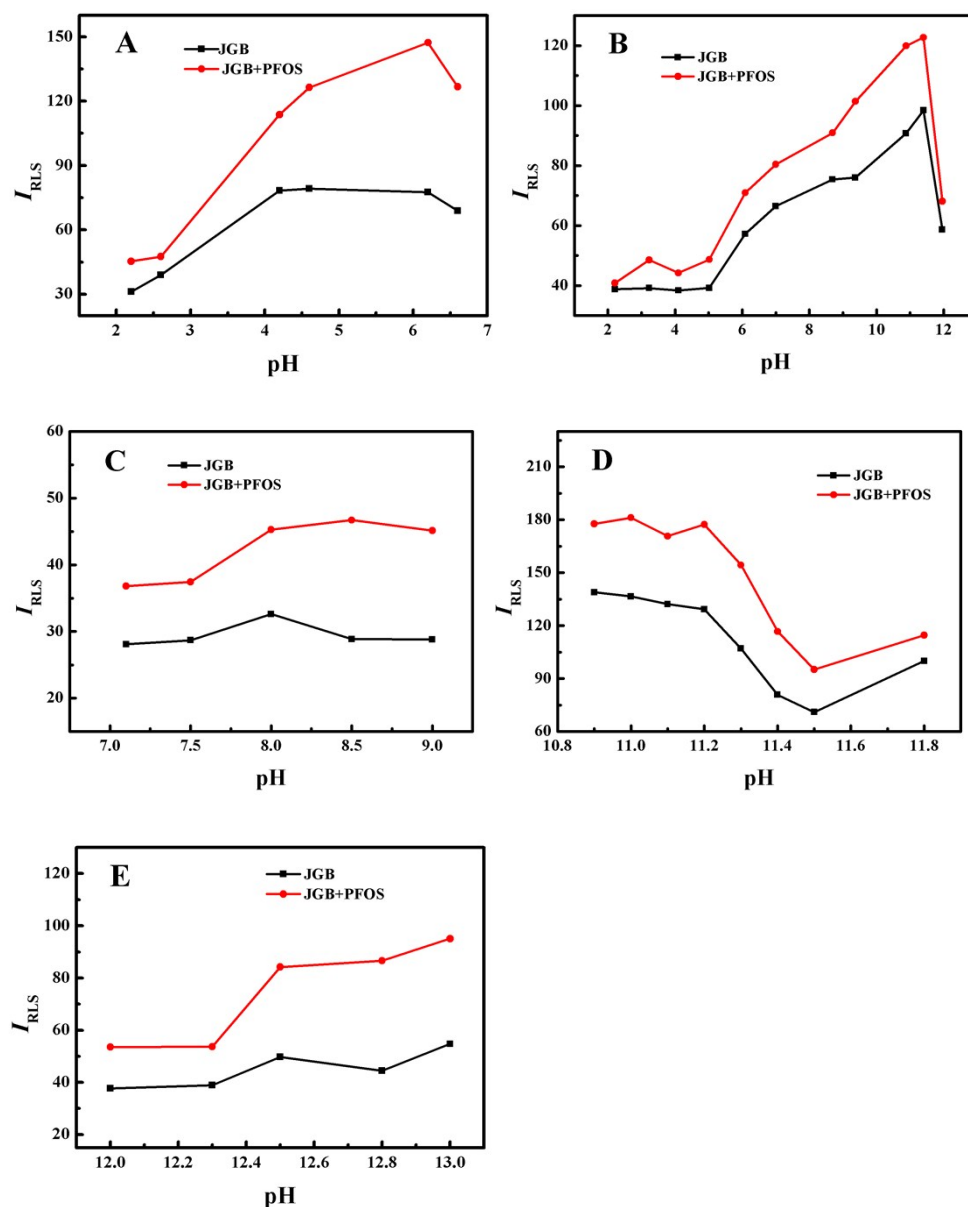


Fig. S2 Effect of pH on the I_{RLS} of JGB in the absence and presence of PFOS. Concentration: PFOS, 1.0 $\mu\text{mol/L}$; JGB, 10.0 $\mu\text{mol/L}$. (A) $\text{Na}_2\text{HPO}_4\text{-CA}$. (B) BR. (C) Tris-HCl. (D) $\text{Na}_2\text{HPO}_4\text{-NaOH}$. (E) KCl-NaOH.

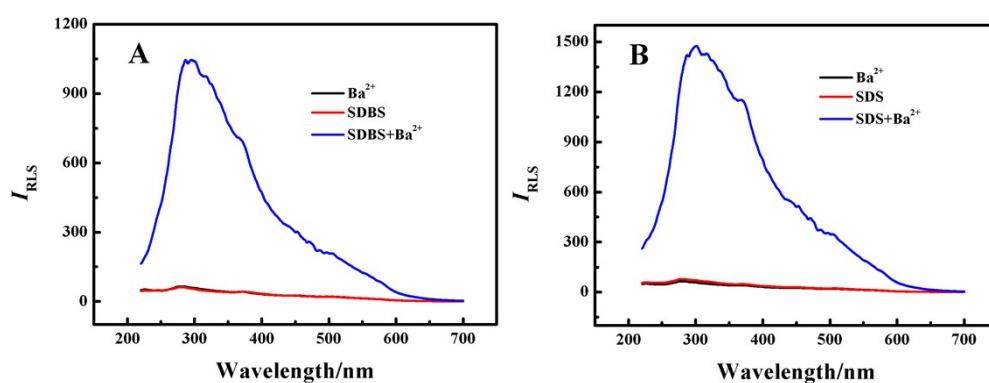


Fig. S3 (A) RLS spectra of Ba^{2+} , SDBS, $Ba^{2+}+SDBS$. (B) RLS spectra of Ba^{2+} , SDS, $Ba^{2+}+SDS$. Concentration: Ba^{2+} , 3000.0 $\mu\text{mol/L}$; SDBS, 50.0 $\mu\text{mol/L}$; SDS, 50.0 $\mu\text{mol/L}$.

Table S1 Comparison of different methods for PFOS/PFOA sensing.

Detection method	Analyte	Linear range/ μM	Detection limit/ μM	Reference
Photoelectrochemical	PFOS	0.5-10	0.1720	1
Fluorescence	PFOS	0.01-0.09	0.0111	2
Colorimetric	PFCs	0.02-2.0	0.0200	3
Fluorescence	PFOA	0.5-40	0.3000	4
Fluorescence	PFOS	0-2.0	0.0150	5
RLS	PFOS	0.05-9.0	0.0056	This work

References

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