Supplementary Information

Comprehensive Insights into Interaction Mechanism between Perfluorodecanoic Acid and Human Serum Albumin †

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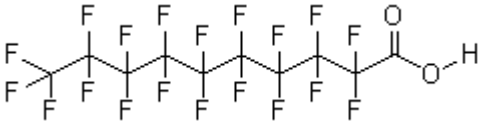

Fig. S1. The structure of PFDA.

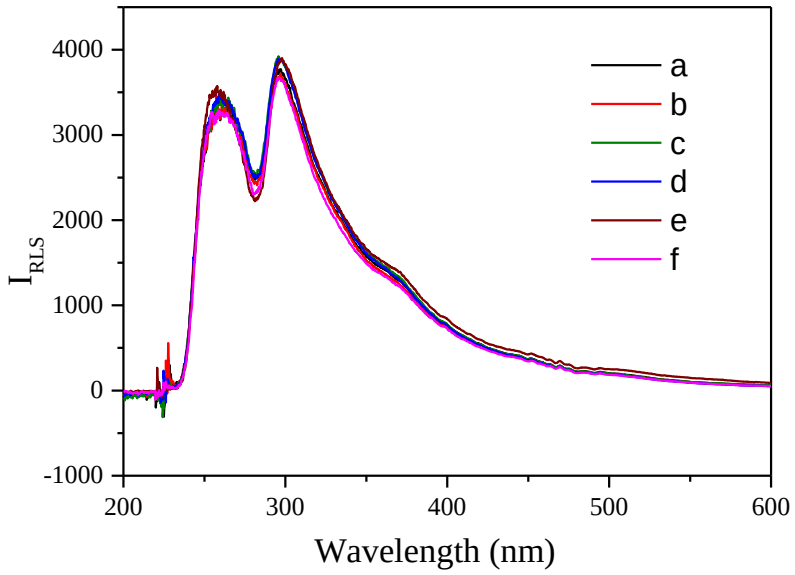

Fig. S2. RLS spectra of HSA with different concentrations of PFDA.

Conditions: c(HSA) = 1×10^{-5} M, c(PFDA)/(1×10^{-6} M):(a) 0,(b) 1,(c) 3,(d) 5,(e) 7,(f) 9;

Buffer: PB, pH = 7.4; T = 298 K.

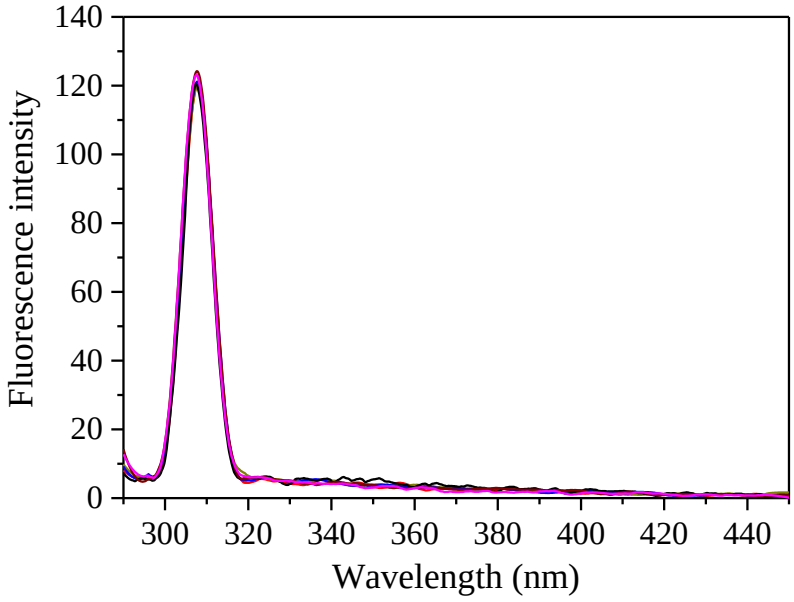

Fig. S3. Fluorescence emission spectra of PFDA.

Conditions: c(PFDA)/(1 ×10^{-6} M):(a) 0,(b) 2,(c) 4,(d) 6,(e) 8,(f) 10;

Buffer: PB, pH = 7.4; T = 298 K.

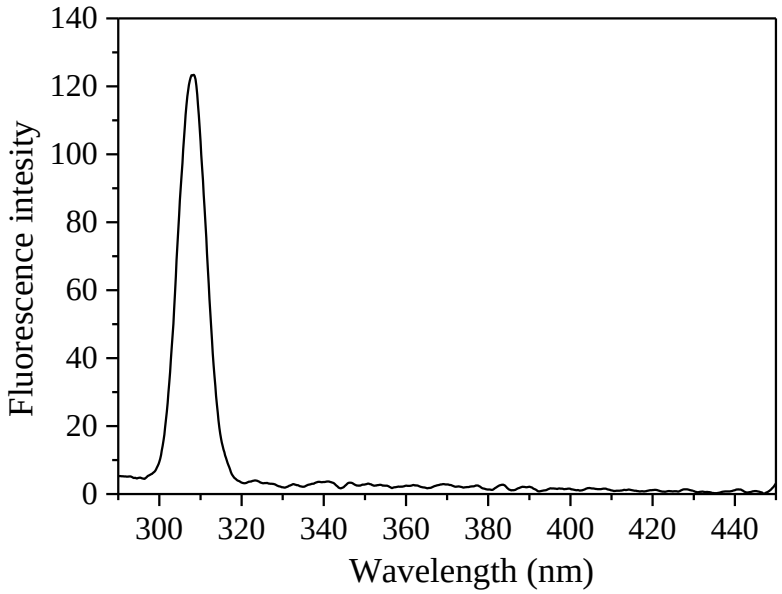

Fig. S4. Fluorescence emission spectra of water.

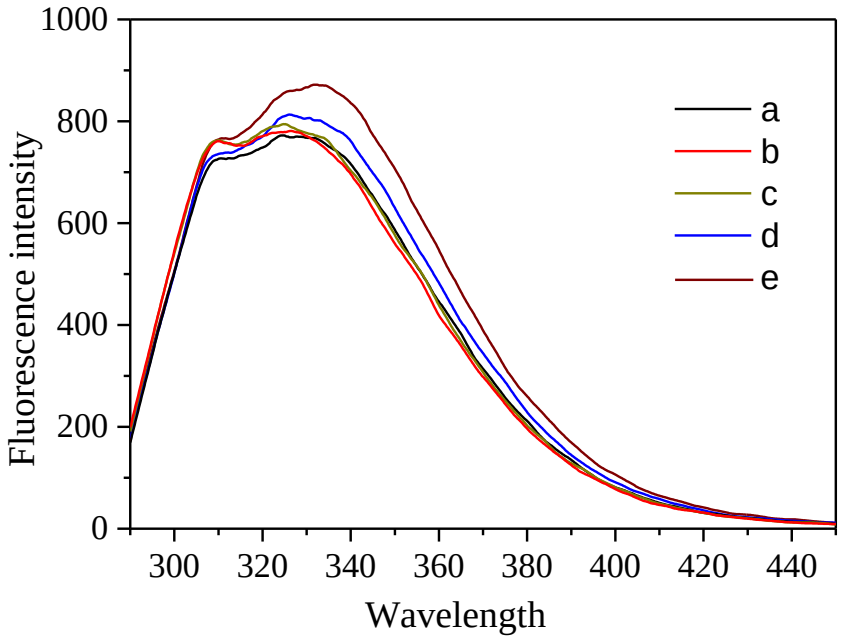

Fig. S5. Fluorescence intensity of HSA with different concentrations of PFDA.

Conditions: c(HSA) = 1 ×10^{-6} M, c(PFDA)/(1 ×10^{-7} M):(a) 0,(b) 3,(c) 5,(d) 7,(e) 9;

Buffer: PB, pH = 7.4; T = 298 K.

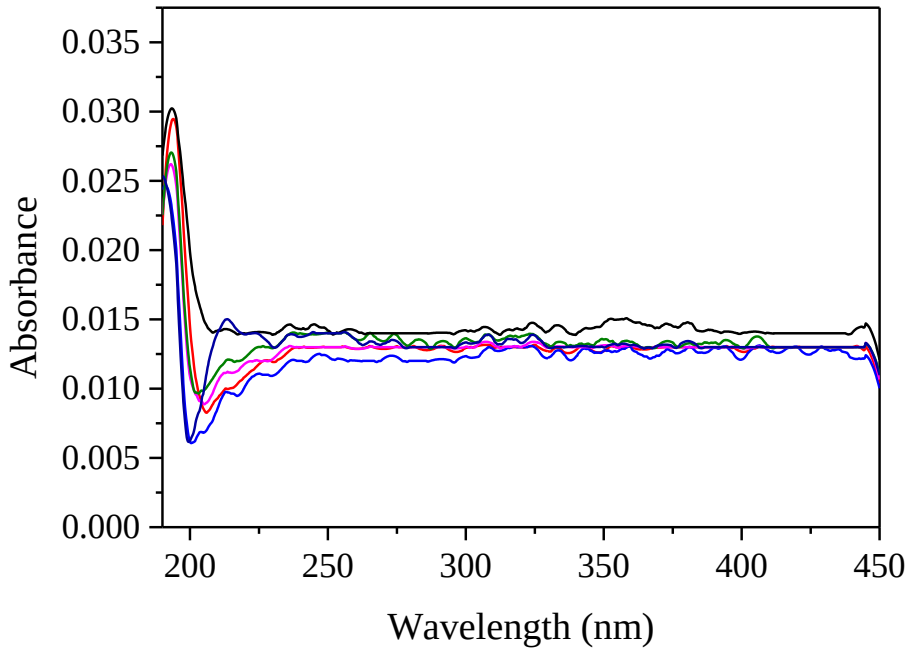

Fig. S6. UV-visible absorption spectra of PFDA.

Conditions: c(PFDA)/(1 ×10^{-6} M):(a) 0,(b) 4,(c) 6,(d) 8,(e) 10,(f) 30;

Buffer: PB, pH = 7.4; T = 298 K.

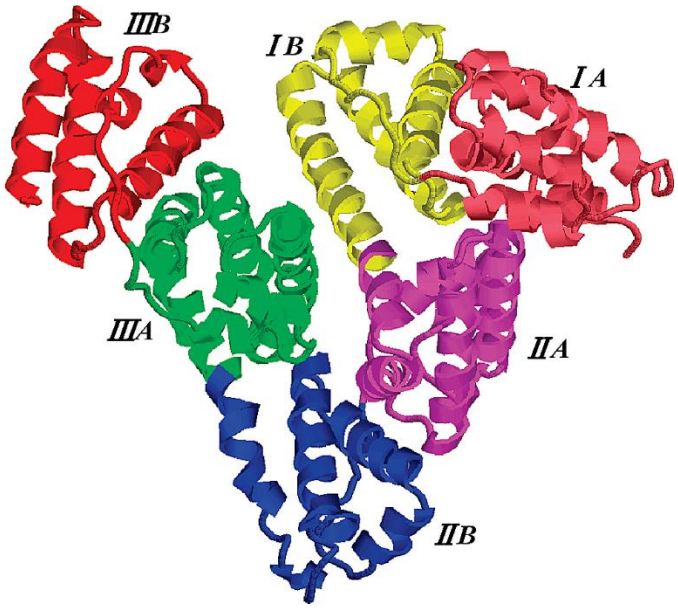

Fig. S7. The structure of human serum albumin.

Table S1. Data for 3D fluorescence spectra of HSA and HSA-PFDA system.

Peak	HSA		HSA-PFDA	
	Peak position $\lambda_{ex}/\lambda_{em}$ (nm/nm)	Intensity	Peak position $\lambda_{ex}/\lambda_{em}$ (nm/nm)	Intensity
1	278/332	929.6	278/328	969.1
2	230/330	852.5	230/334	1088