

Supplementary Data

Modify Carbon Dots with L-Phenylalanine for Rapid Discriminating Tryptophan Enantiomers

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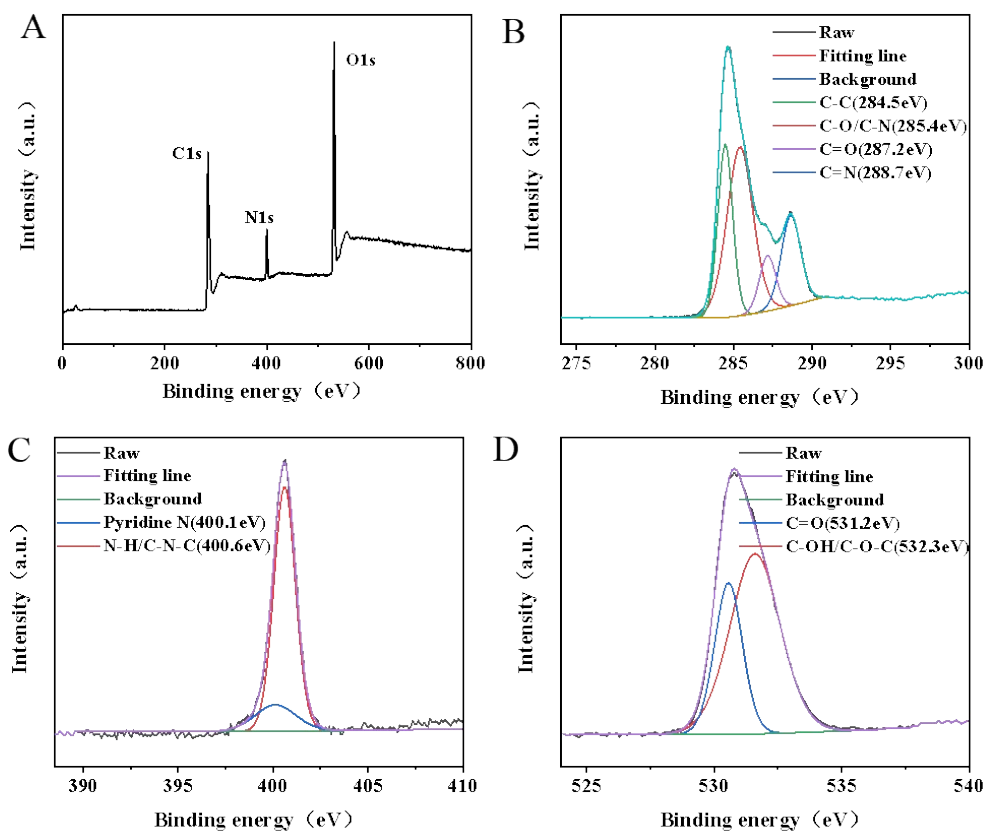


Fig. S1 XPS wide spectrum (A), high resolution XPS spectra of C1s (B), N1s (C) and

O1s (D) of the original CDs

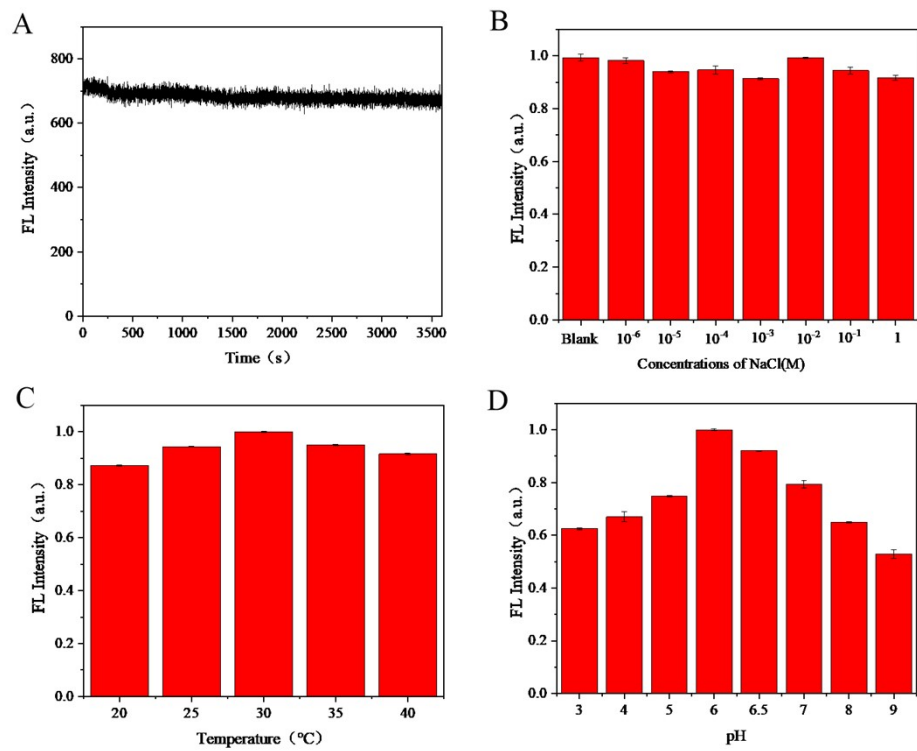


Fig. S2 FL intensity of the L-PCDs as a function of illumination time (A), concentrations of NaCl (B), temperature (C) and pH (D) ($\lambda_{\text{ex}}=380$ nm).

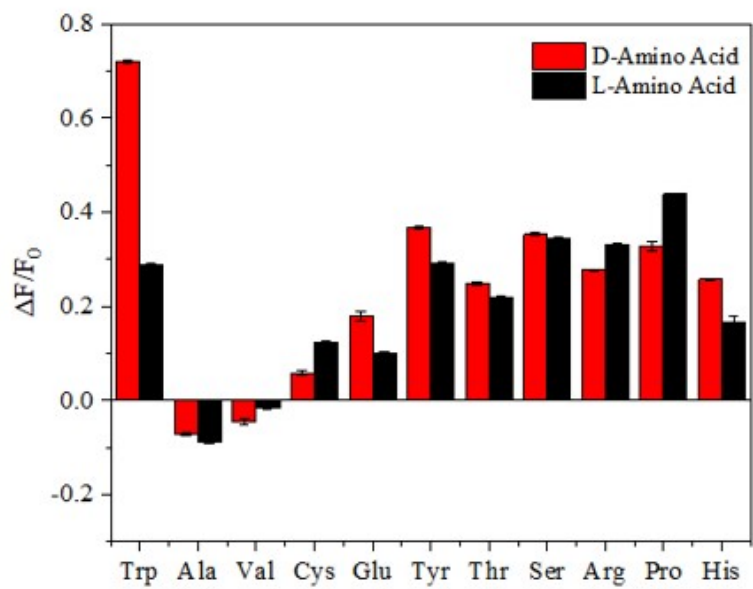


Fig. S3 Enantiomeric responses of L-PCDs to common amino acids.

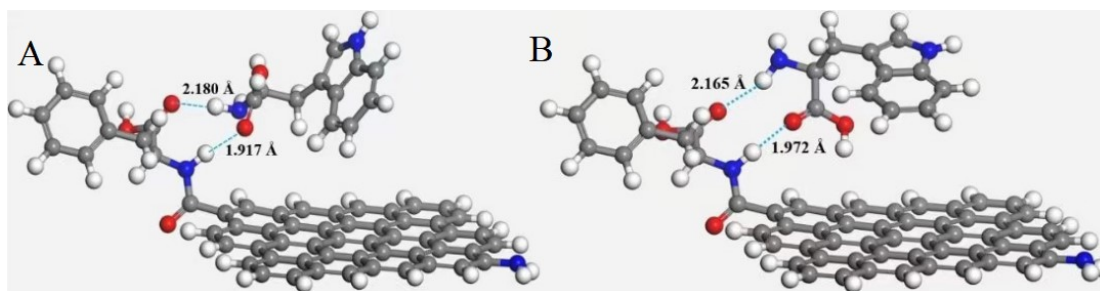


Fig. S4 The combined model optimized L-PCDs with D-Trp (A), L-Trp (B)

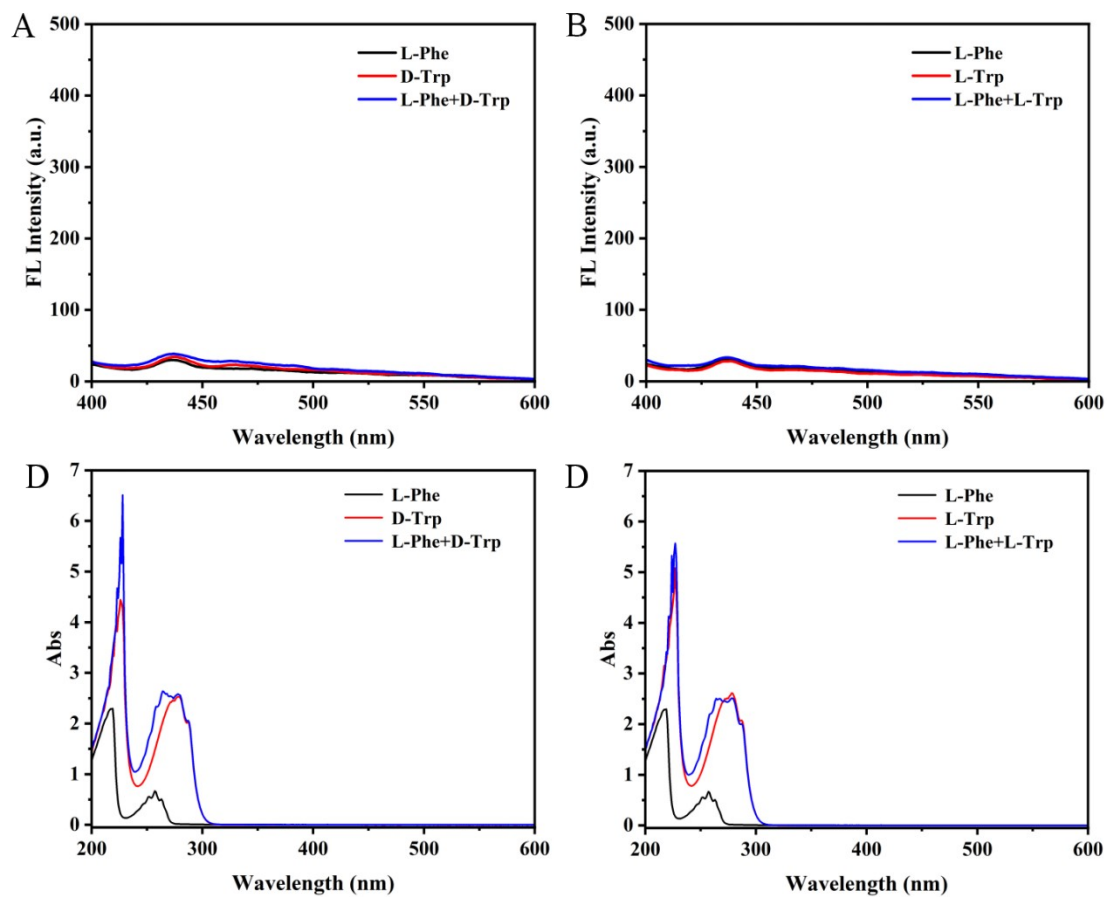


Fig. S5 FL spectra of L-Phe, D-Trp and L-Phe + D-Trp (A), L-Phe, L-Trp and L-Phe + L-Trp (B), UV-Vis spectra of L-Phe, D-Trp and L-Phe + D-Trp (C), and L-Phe, L-Trp and L-Phe + L-Trp (D).

Table S1 Elemental composition of L-PCDs and original CDs

	C%	N%	O%
L-PCDs	78.58	11.62	9.81
original CDs	67.21	7.02	25.59