

Supporting Information

Solvent-Controlled Synthesis of Hydrophilic and Hydrophobic Carbon Dots

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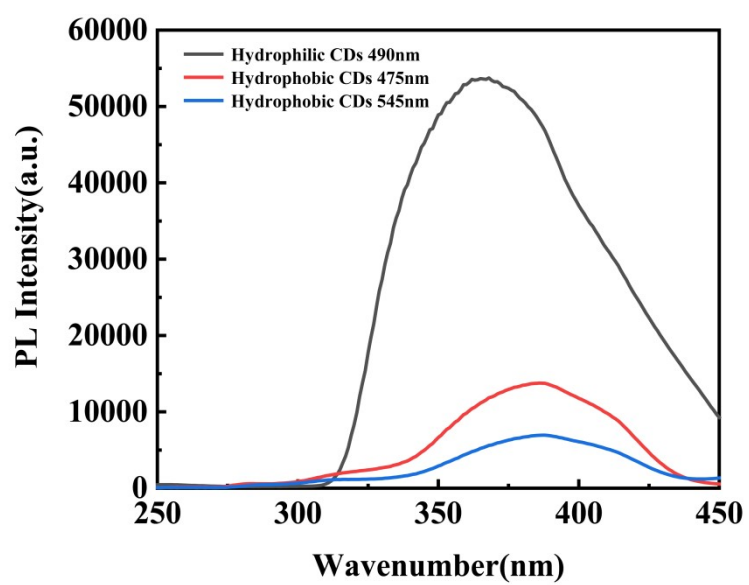


Fig. S1. The PL excitation (PLE) spectra of the hydrophobic and hydrophilic CDs.

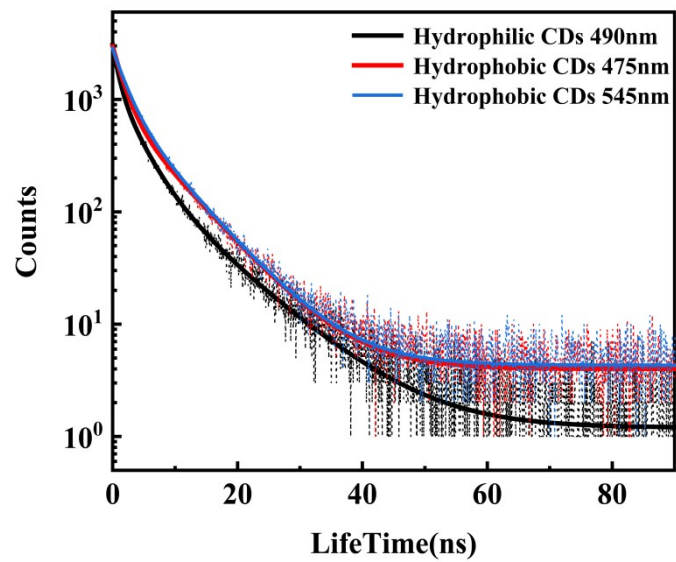


Fig. S2. The PL decay curves of hydrophobic and hydrophilic CDs at different emission wavelengths.

Table S1. The lifetime of hydrophobic and hydrophilic CDs at different emission wavelengths.

	τ_1 (ns)	f_1 (%)	τ_2 (ns)	f_2 (%)	τ_3 (ns)	f_3 (%)	τ_{avg} (ns)
Hydrophilic CDs 490nm	0.907 ± 0.04	20.68 ± 0.34	3.179 ± 0.13	47.05 ± 0.08	9.160 ± 0.21	32.27 ± 0.29	4.6 ± 0.15
Hydrophobic CDs 475nm	1.702 ± 0.03	38.58 ± 0.04	7.07 ± 0.07	61.42 ± 0.12			5.0 ± 0.06
Hydrophobic CDs 545nm	2.083 ± 0.04	39.63 ± 0.21	6.979 ± 0.08	60.37 ± 0.23			5.0 ± 0.07

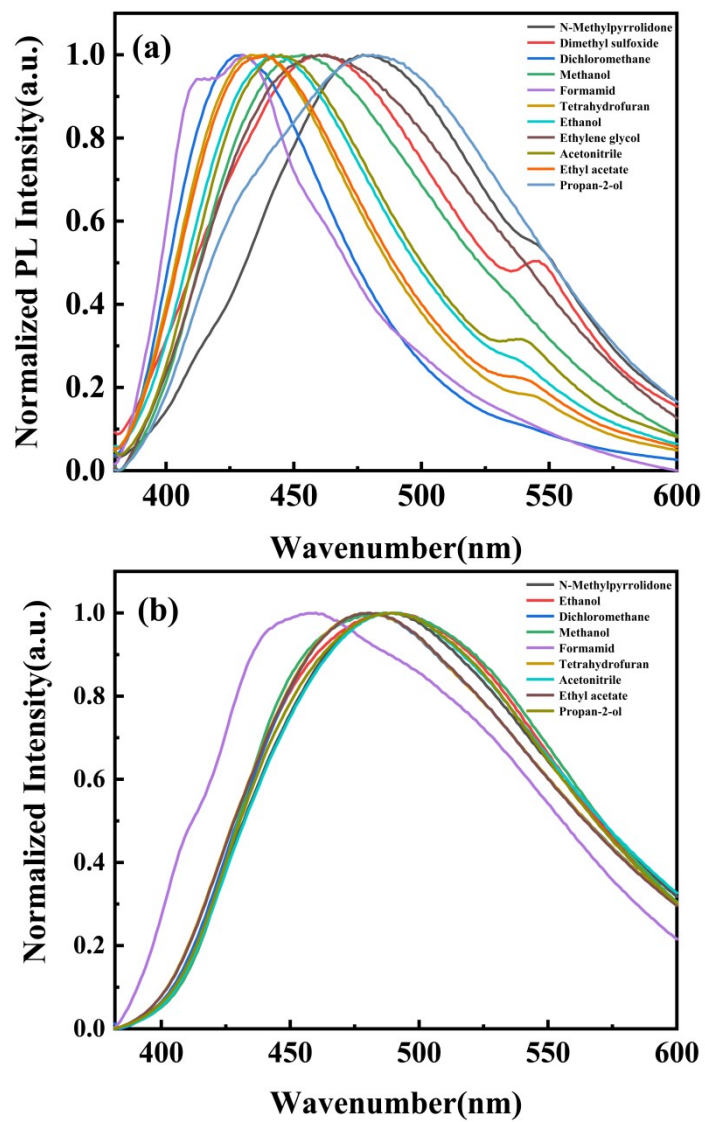


Fig. S3. Normalized PL spectra of (a) hydrophobic CDs and (b) hydrophilic CDs, in different solvents.

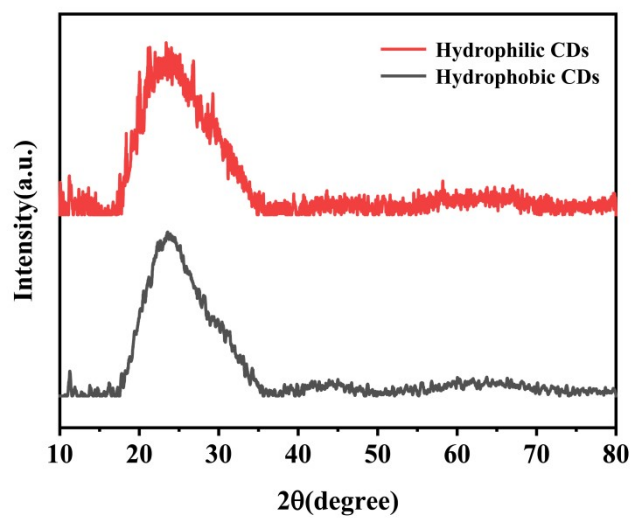


Fig. S4. XRD patterns of the hydrophilic CDs and hydrophobic CDs.

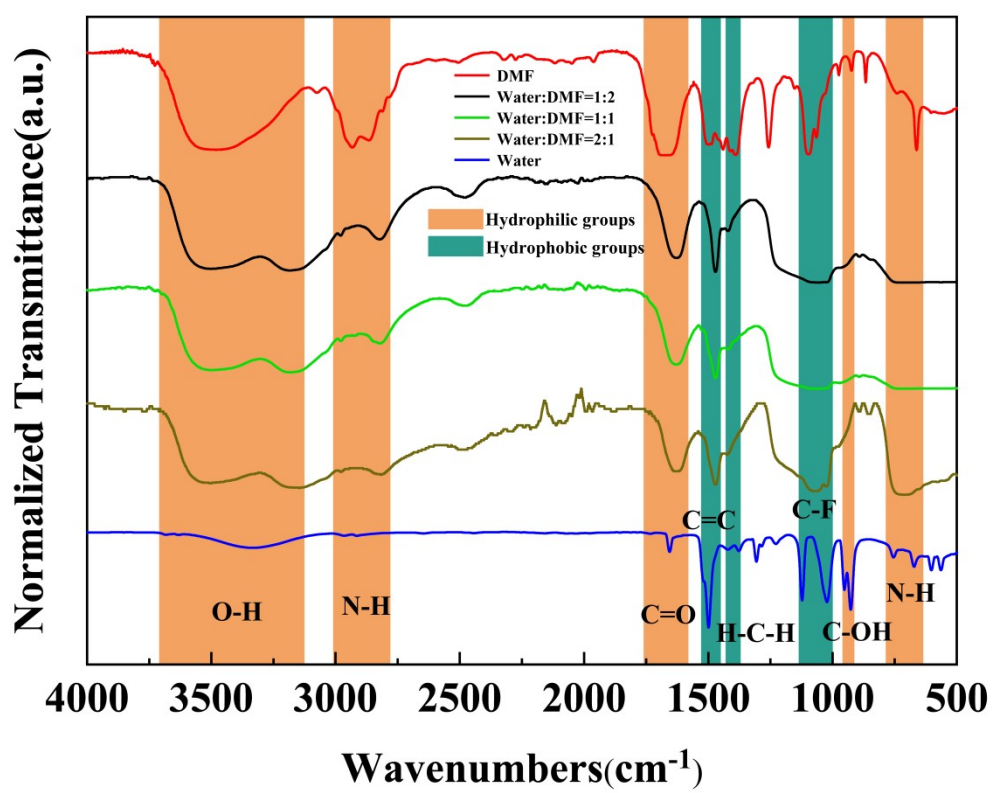


Fig. S5. FT-IR spectra of all prepared CDs normalized at C=C.