coatings

Supplementary Materials: pH-Sensitive Fluorescence Emission of Boron/Nitrogen Co-Doped Carbon Quantum Dots

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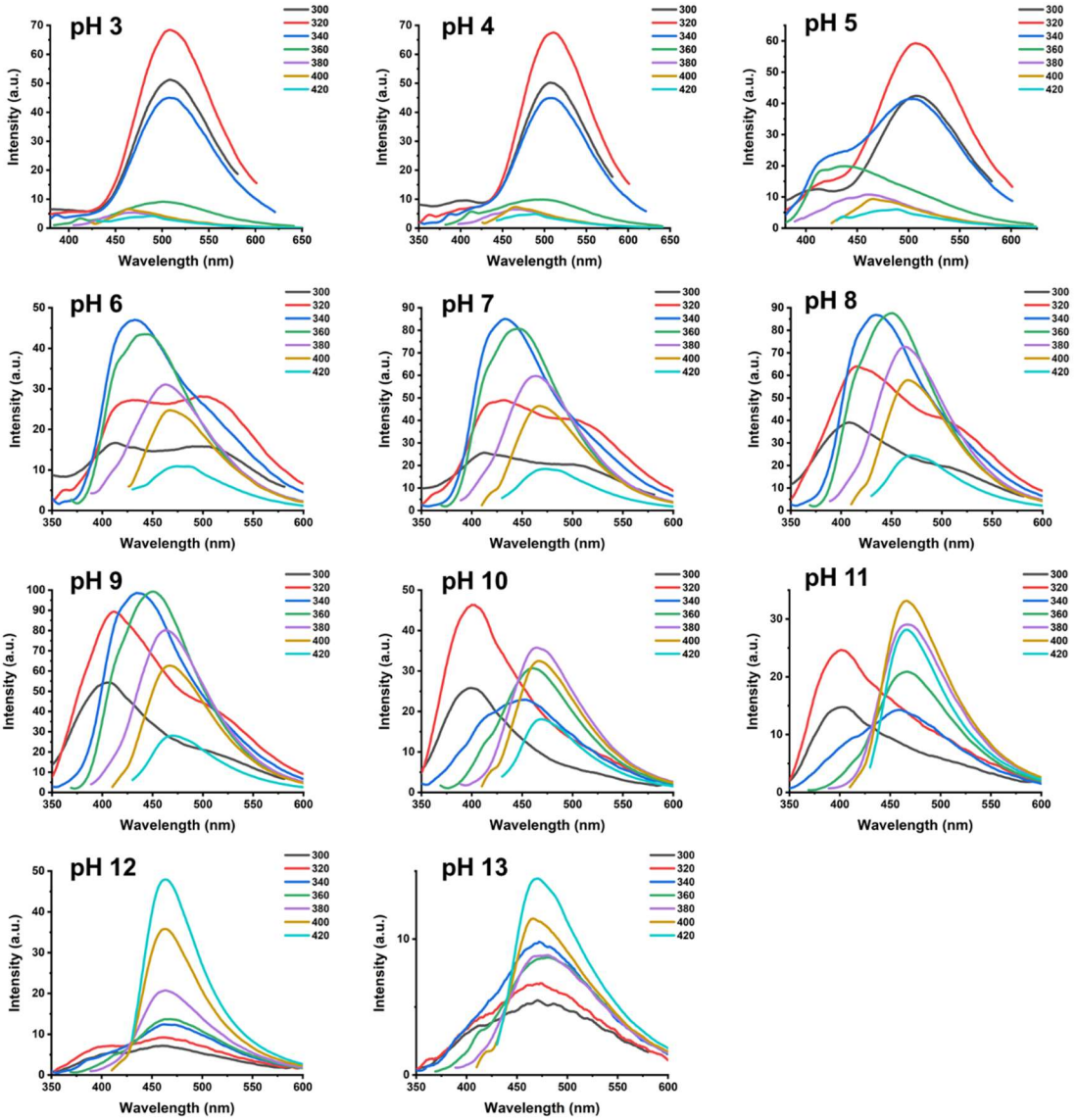


Figure S1. The PL spectra of B/N-CQDs at different pH conditions and excitation wavelengths.

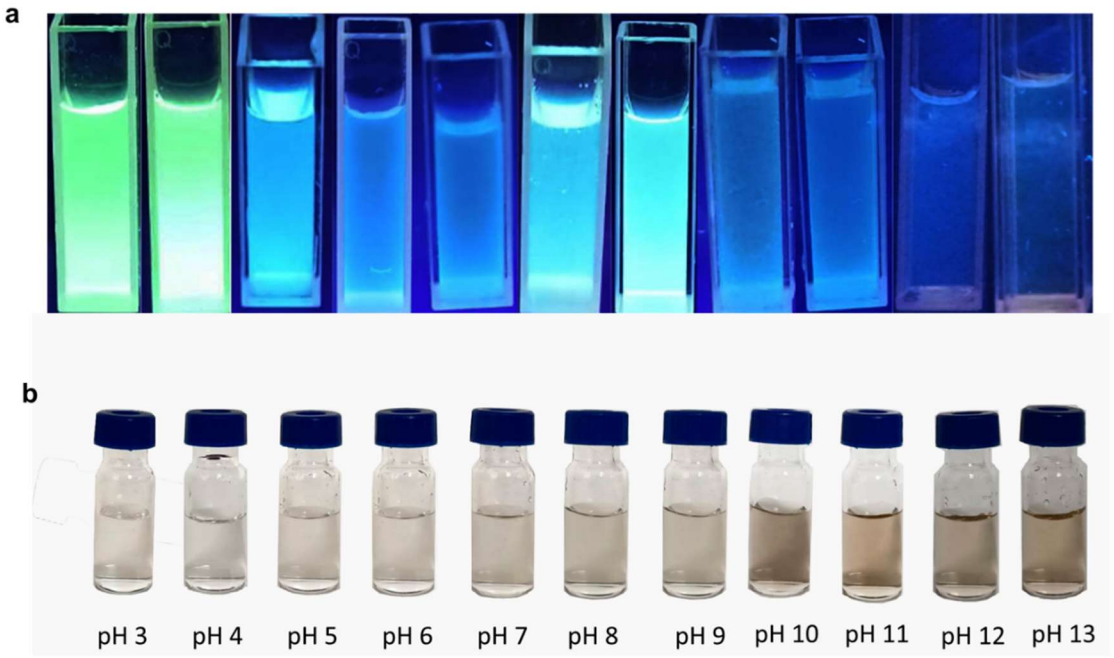


Figure S2. Optic images of CQDs at different pH conditions under a 365-nm UV lamb (**a**) and daylight (**b**).

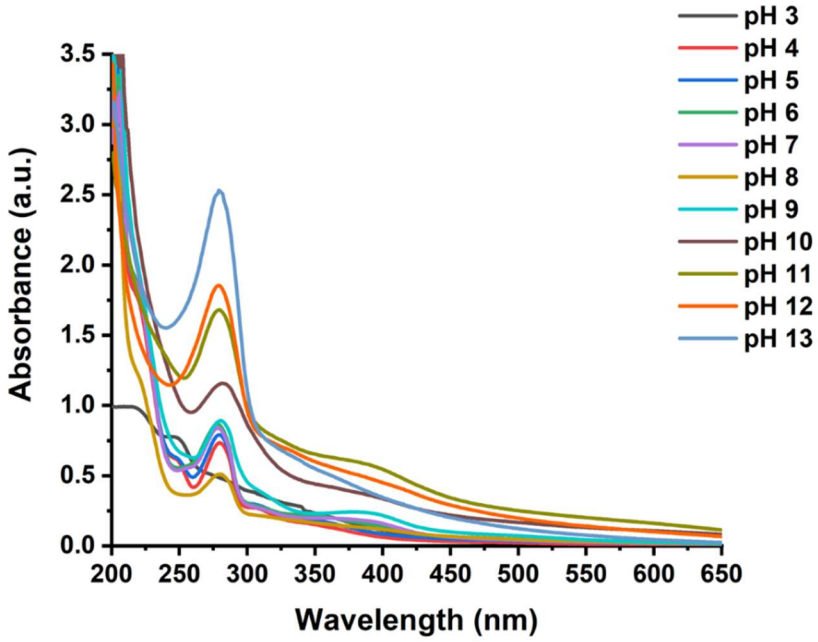
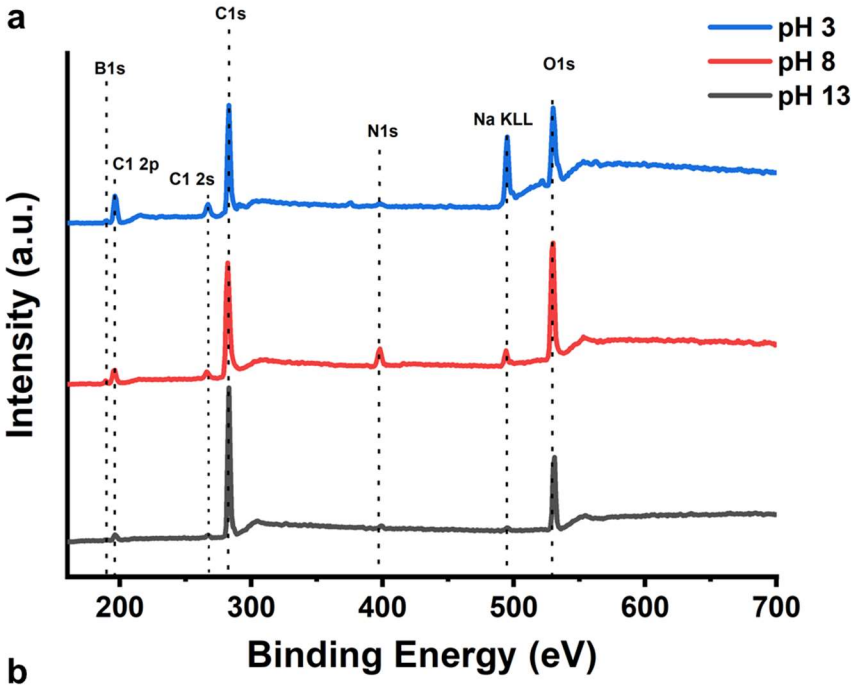


Figure S3. UV-vis absorption spectra of B/N-CQDs at different pH.



b

pH	C	N	O	B
3	81.61	0.93	15.88	1.55
8	68.66	5.99	22.95	2.37
13	73.51	2.02	22.12	2.34

Figure S4. XPS survey spectrum (**a**) and elemental percentage of B/N-CQDs (**b**) under different pH conditions.

Table S1. Deconvolution of C1s under different pH conditions.

pH	C-C/C=C	C-N	C-O	C=O
3	70.9	24.0	2.6	2.3
8	74.1	6.5	17.6	1.70
13	42.3	29.7	24.6	3.2

Table S2. Deconvolution of O1s under different pH conditions.

pH	C=O	C-O
3	15.4	84.5
8	30.9	69.0
13	54.8	25.4

Table S3. Deconvolution N1s under different pH conditions.

pH	N-H (Pyrrolic)	C-N=C (Pyridinc)	N-$(C)_3$ (Graphitic)
3	73.8	13.8	12.2
8	49.6	44.02	6.3
13	27.3	28.4	44.2