Supplementary Information (SI) for Journal of Materials Chemistry C.

Supporting Information

A Rapid, Green and Cost-Effective Synthesis of pH- and Hydroxyl Group Sensitive Carbon Dots for Sensing Applications

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Results

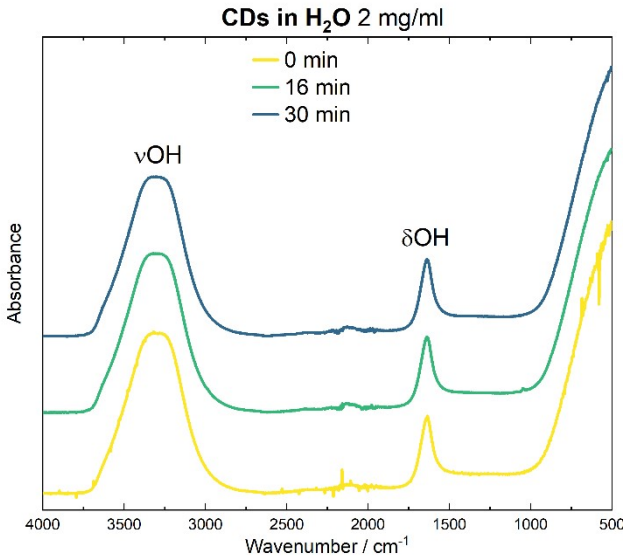

Figure S1. The time evolution of IR spectra collected for a 2 mg/ml suspension of CDs in water;

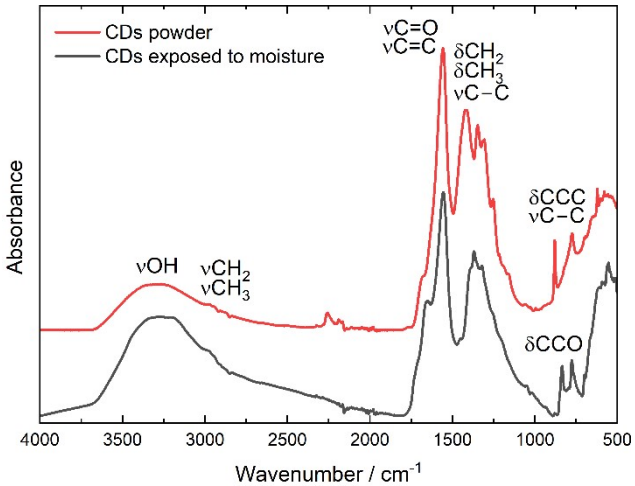

Figure S2. The reference ATR spectra of pristine CDs powder and powder exposed to moisture in air (after two weeks).

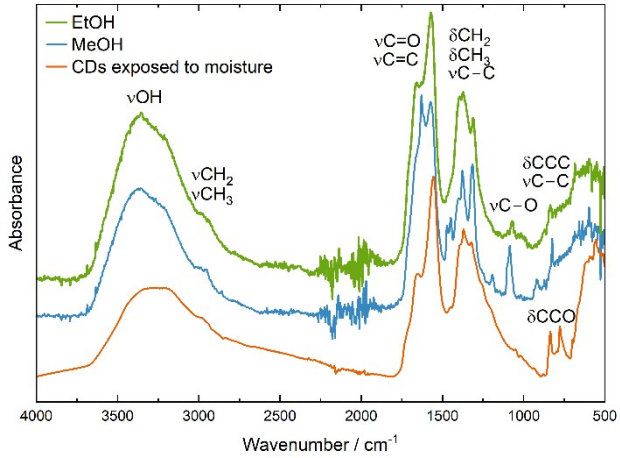

Figure S3. A comparison of ATR spectra of CDs exposed to moisture and after the experiments when suspended in MeOH and EtOH.

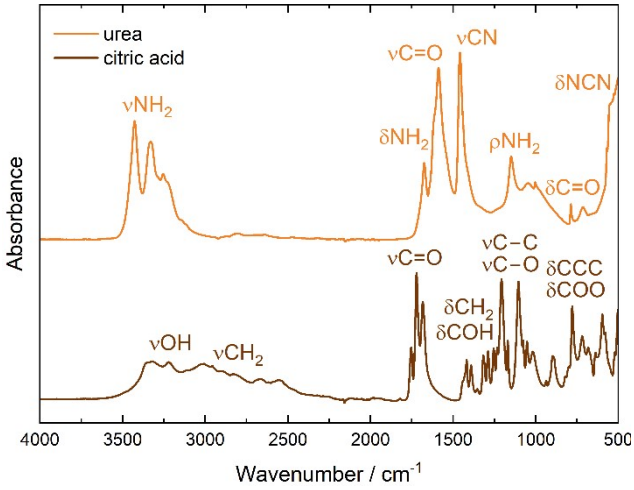

Figure S4. The reference ATR spectra of polycrystalline citric acid and urea.

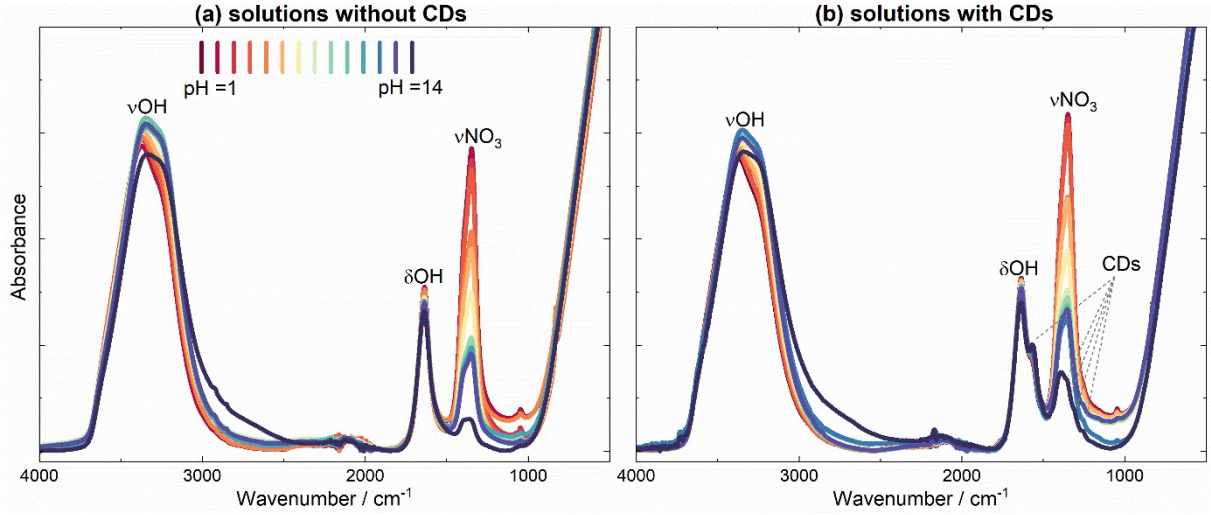

Figure S5. The ATR spectra measured for pH-dependent solutions without (a) and with (b) CDs (2mg/ml).

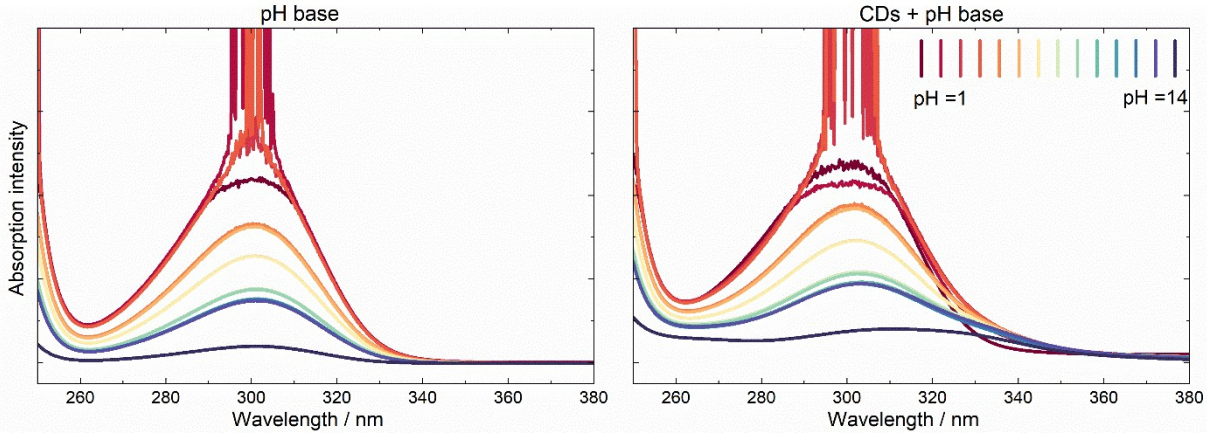

Figure S6. The absorption spectra of pH base and base with CDs.

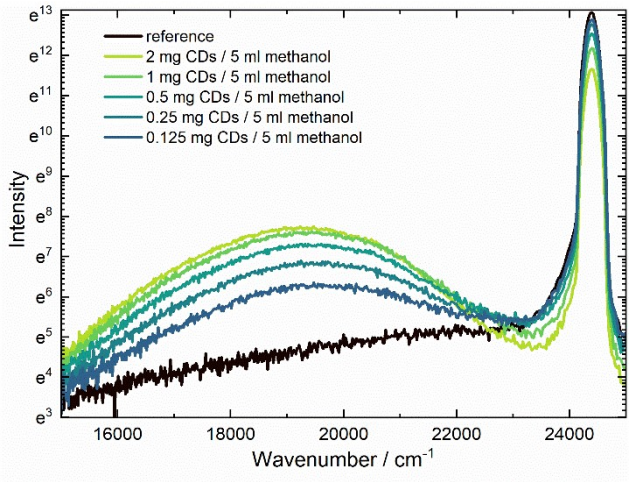

Figure S7. The fluorescence quantum yield of CDs in methanol at different concentrations.

Table S1. Comparison of fluorescence quantum yield for CDs in methanol at different concentrations.

Concentration of CDs in methanol	QY
1mg / 5ml	16.36%
0.5mg / 5ml	17.49%
0.25mg / 5 ml	18.00%
0.125mg / 5 ml	16.44%