

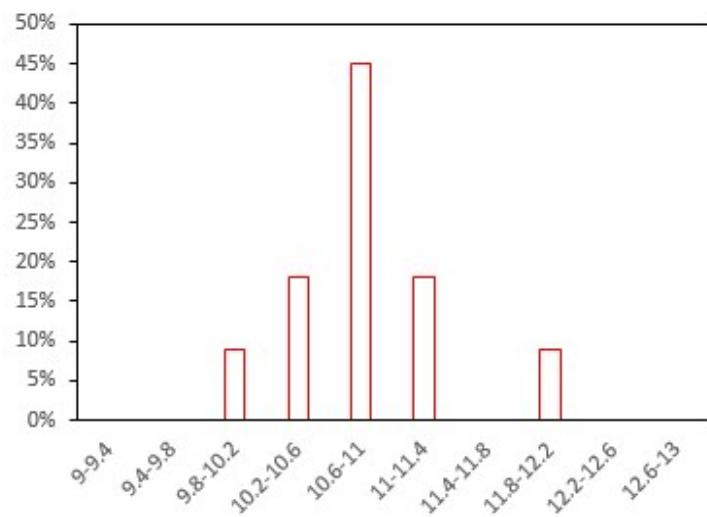
## Supplementary Material

### **A novel high pH-sensitive nitrogen-doped yellow fluorescent carbon dots based one-step synthesis and detection application in living cells**

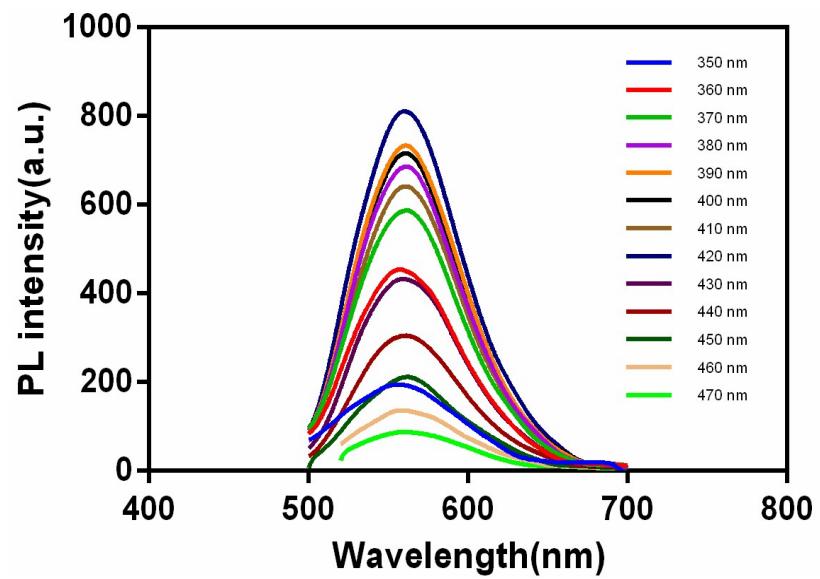
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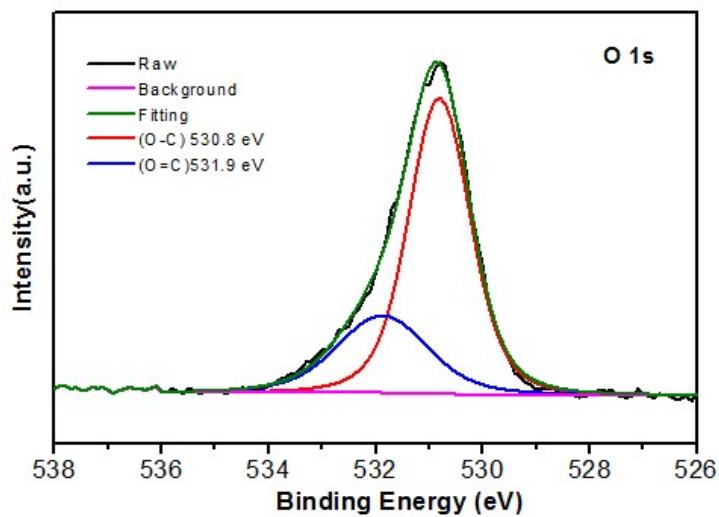
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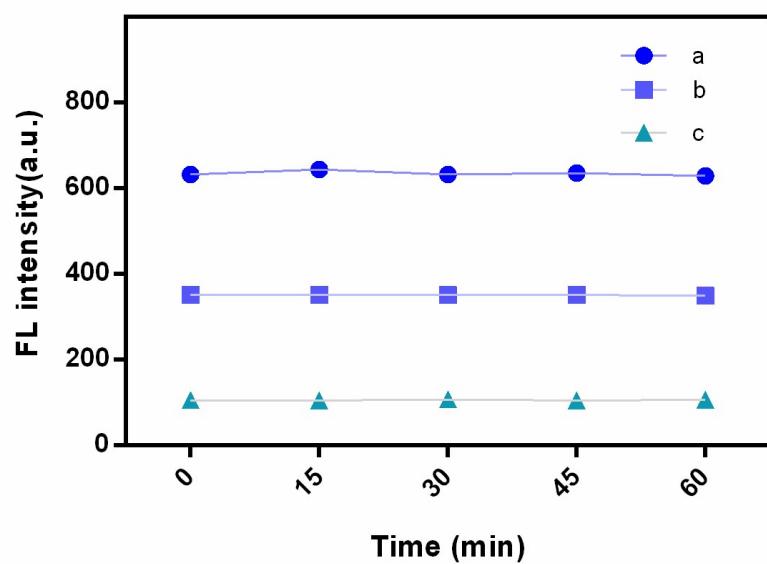
**Fig.S1** size distribution histogram of the N-CDs.



**Fig.S2** Fluorescence emission spectra of the N-CDs recorded at excitation wavelengths from 350 nm to 470 nm.



**Fig.S3** O1s spectra of the N-CDs.



**Fig.S4** Time scan of the fluorescence intensity of N-CDs for 1h at pH=6.0 (a), 5.0 (b), 4.0 (c).