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## New Journal of Chemistry

## **Supplementary Information**

## Carbon dots prepared from citric acid and urea by microwave-assisted irradiation as a turn-on fluorescent probe for allantoin determination

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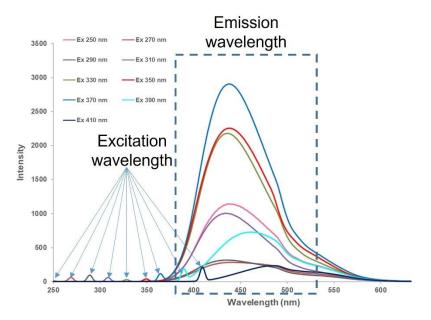


Fig. S1 Emission Spectra of the CDs with different excitation wavelengths.

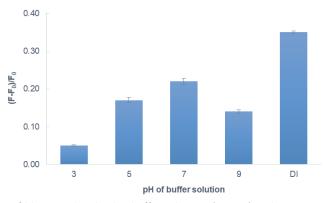
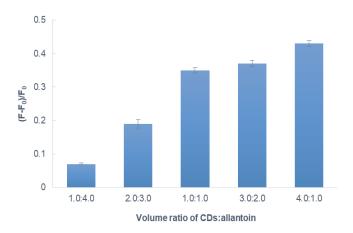


Fig. S2 Enhancement factor of blue CDs dissolved in buffer solutions (pH 3-9) and in DI water with 10 ppm allantoin under volume ratio of 1:1 and a reaction time of 15 min.



**Fig. S3** Enhancement factor of blue CDs dissolved in DI water mixed with 10 ppm allantoin at different ratios. A total volume mixture of  $500 \, \mu$ L was used and a reaction time of 15 min.

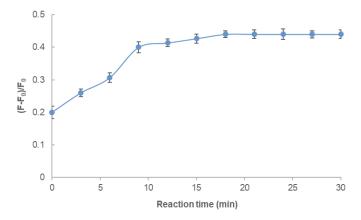
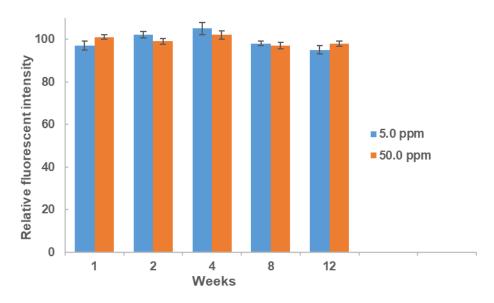


Fig. S4 Enhancement factor of blue CDs dissolved in DI water mixed with 10 ppm allantoin (4:1 ratio of CD: allantoin) at different reaction times.



**Fig. S5** The relative fluorescent intensities of the CDs in the presence of 5.0 and 50.0 ppm allantoin, using the same batch of the CDs during 3 months of storing.