Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

Nitrogen-doped carbon dots derived from electrospun carbon nanofibers for Cu(II) ions sensing

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Figure

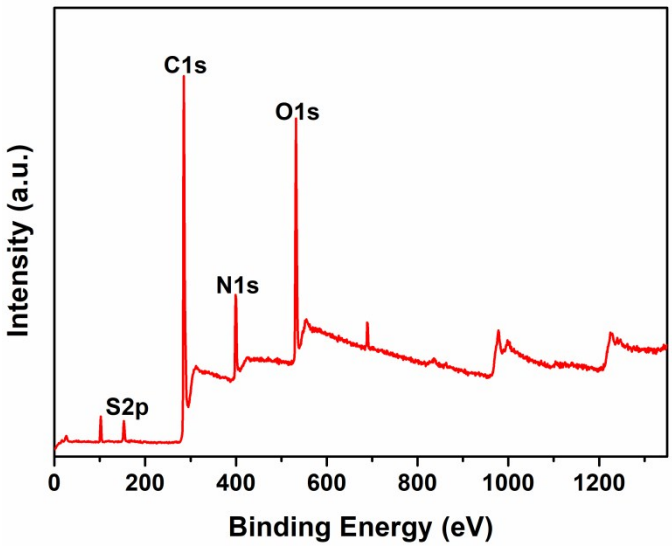

Figure S1 XPS survey of N-CDs.

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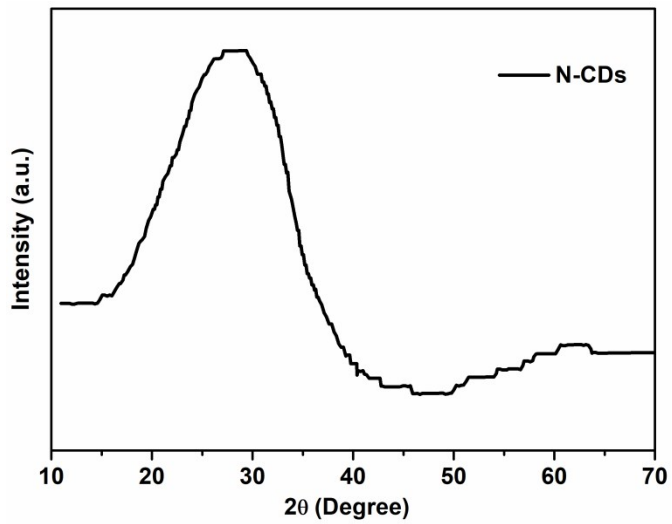

Figure S2 The XRD pattern of N-CDs.

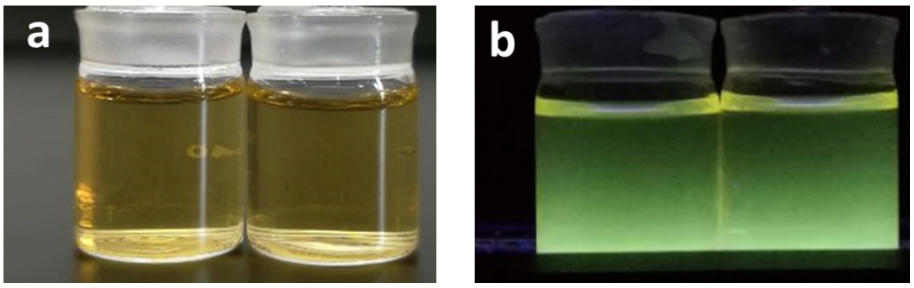

Figure S3 (a) The photo of N-CDs solution under sunlight. (b) The fluorescence images of N-CDs solution excited by a UV lamp (365 nm).

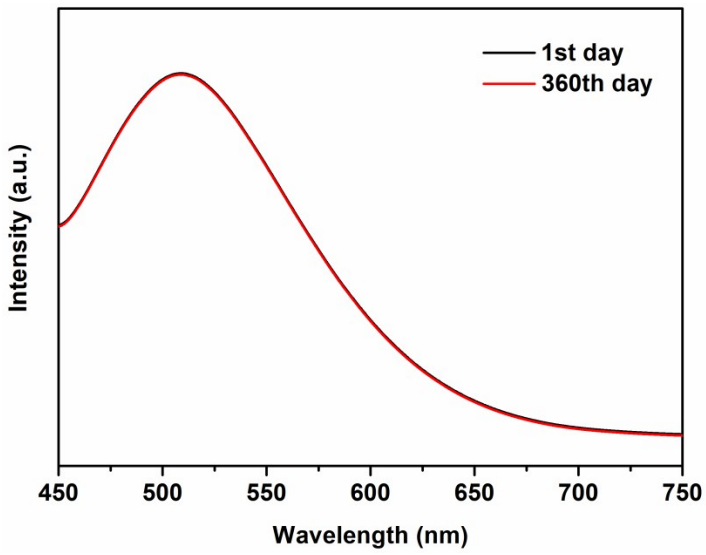

Figure S4 The stability of N-CDs after 360 days of storage.

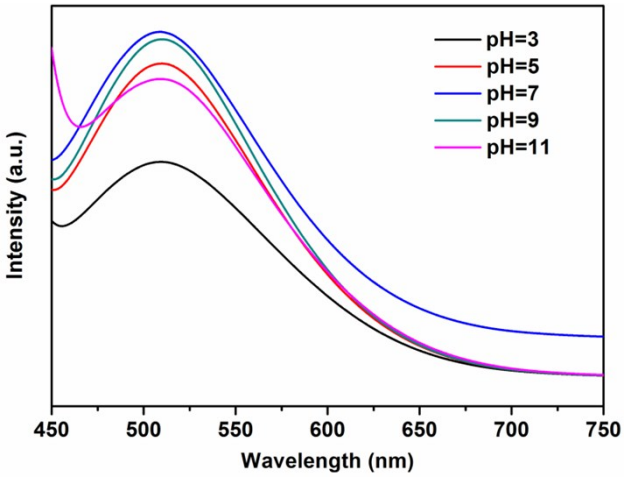

Figure S5 Photoluminescence (PL) spectra of N-CDs changed at different pH values.

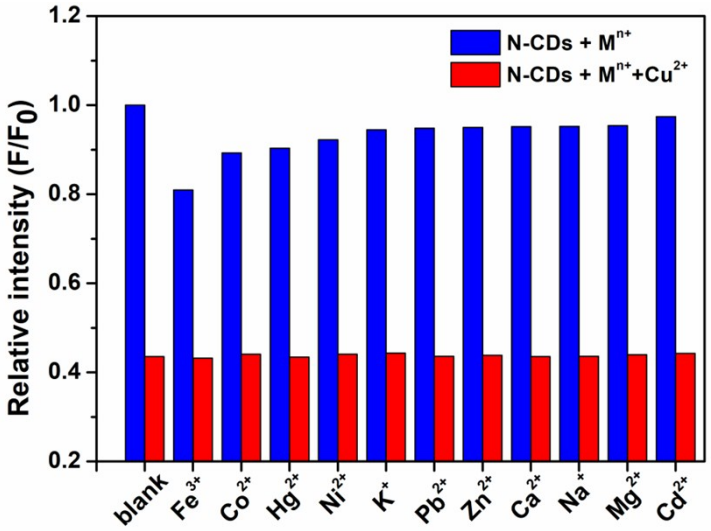

Figure S6 Relative PL intensities of N-CDs after treatment with 25 mM metal ion solutions (blue bar), and interference of 25 mM other metal ions with 25 mM Cu^{2+} (red bar).

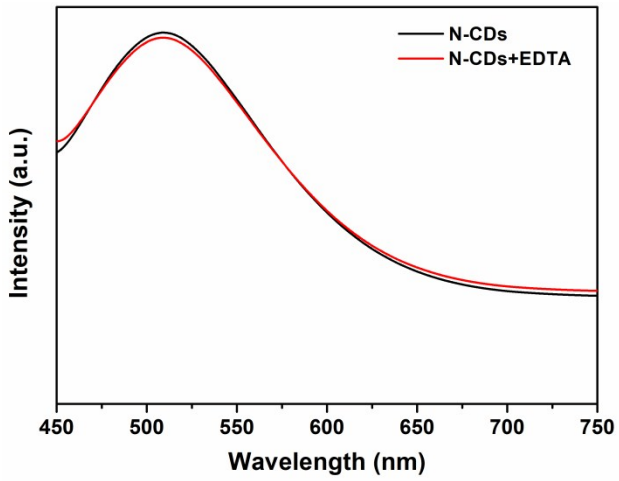

Figure S7 PL spectra of N-CDs solutions in the absence or presence of 25 μM EDTA.

Table

Table S1 Comparison of the N-CDs solution for Cu^{2+} ions detection with other similar materials.

Refs.	Materials	Detection limit (nM)
1	Carbon dots-modified silver nanoparticles	37
2	N-doped carbon dots from lemon juice and L-arginine	47
3	Blue fluorescent carbon dots from leeks	50
4	N-doped carbon dots from maleic anhydride and tetraethylenepentamine	620
5	Quantum dots	10
6	Carbon nano-dots from chitosan, ethanolamine and acetic acid	170
7	Semiconducting polymer dots assembled with rhodamine B hydrazide	15
This work	N-doped carbon dots from electrospun carbon nanofibers	5

References for Table S1:

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