

Supplementary materials

**Nanospace-confined preparation of uniform nitrogen-doped graphene quantum dots for highly
selective fluorescence dual-function determination of Fe³⁺ and ascorbic acid**

Hongbo Xu, Shenghai Zhou*, Jinyu Liu and Yajun Wei

College of Chemistry and Chemical Engineering, Hebei Normal University for Nationalities,

Chengde 067000, China

Corresponding author. Tel.: +86 314 2370567

E-mail address: zhoush10@mails.jlu.edu.cn

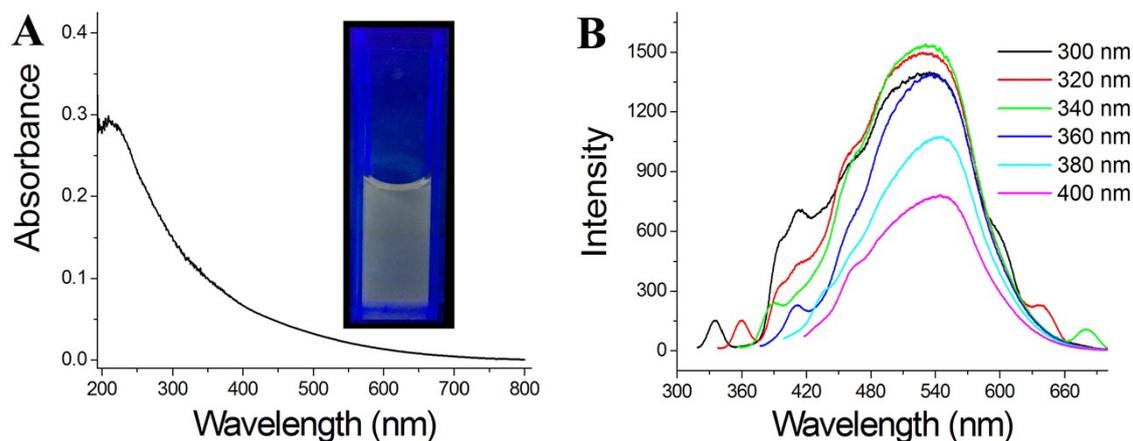


Figure S1. (a) UV-vis absorption spectrum of the N-GQDs dispersed in water. Inset: photograph of the N-GQDs solutions taken under illumination of UV light (365 nm). (b) Fluorescence emission spectra of the N-GQDs aqueous solution at different excitation wavelengths from 300 to 400

Table S1. Determination of Fe^{3+} in tap water samples (n=3).

	Added (μM)	Detected (μM)	Recovery (%)	RSD (%)
Sample 1	10	10.36	103.6	4.5
Sample 2	20	18.62	93.1	3.2
Sample 3	30	32.19	107.3	5.7

Table S2. Determination of AA in fish blood samples (n=3).

	Added (μM)	Detected (μM)	Recovery (%)	RSD (%)
Sample 1	10	9.53	95.3	4.8
Sample 2	30	30.45	101.5	1.5
Sample 3	40	42.48	106.2	2.7