Supporting Information

Inner-Filter Effect Pair of Nitrogen-Doped Carbon Quantum Dots-MnO_2 Nanotubes for Smartphone-Integrated Dual-mode Sensing of Glutathione and Captopril.

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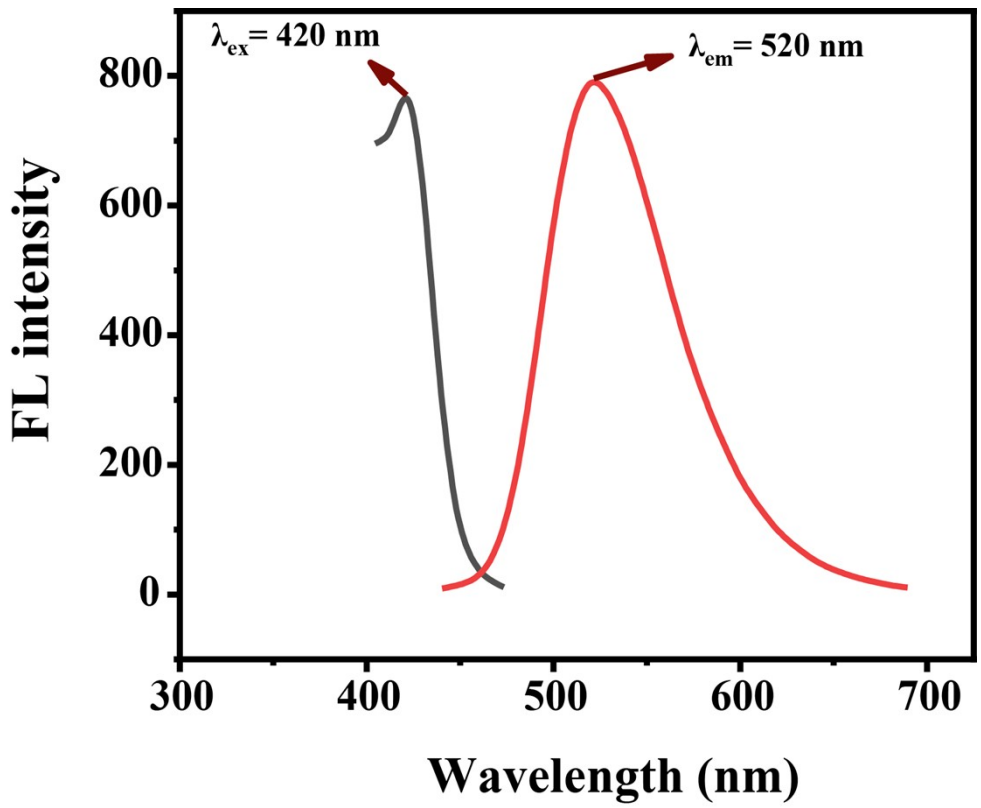

Figure S1: Normalized excitation and emission spectra of N-CQDs.

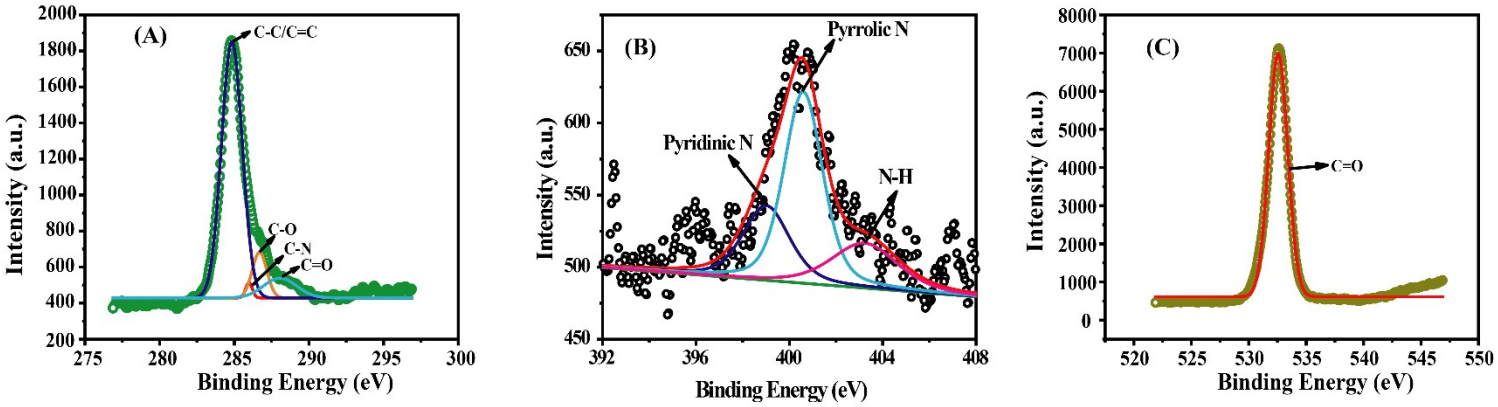

Figure S2: Denvoluted XPS spectra of (A) C 1s, (B) N 1s and (C) O 1s of N-CQD.

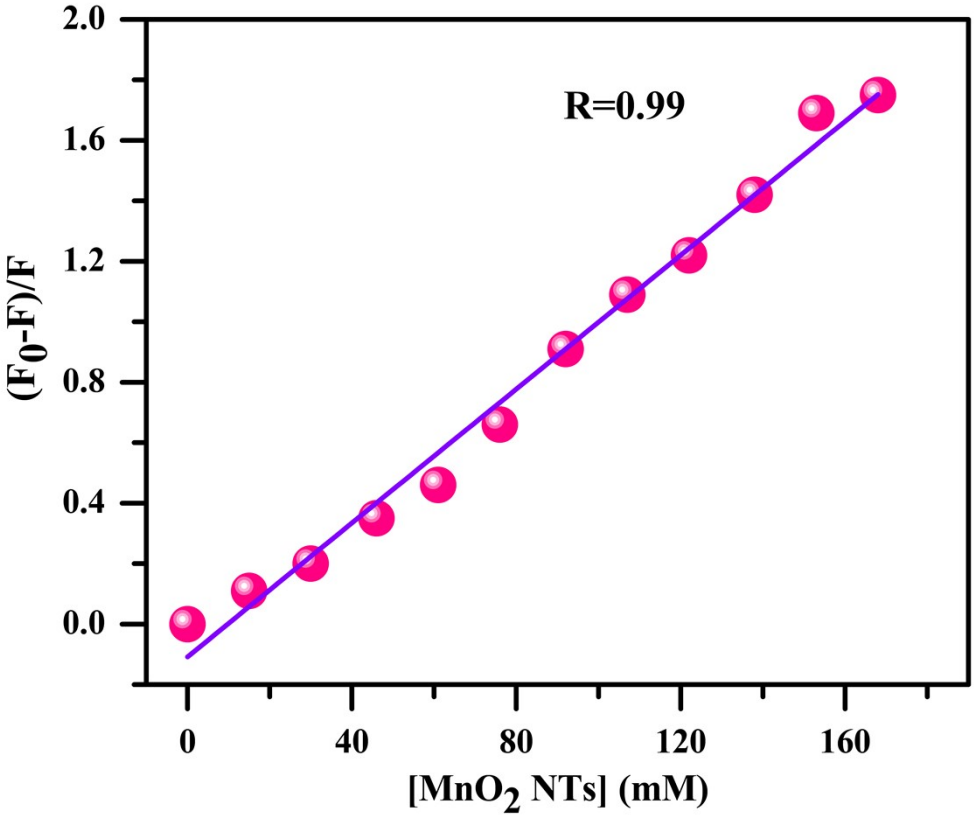

Figure S3: Stern-Volmer plot for MnO_2 NTs quenching N-CQDs.

Table S1: Comparison table of LOD values for the GSH by using different sensing probes and techniques.

Sensing probe	**Technique**	**Detection range**	**LOD**	**References**
AuNCs@BSA-MnO_2NSs	Fluorescence	0−0.5 mM	20 μM	1
Cobalt phthalocyanine and multiwalled carbon functionalized with Carboxyl groups	Differential pulse Voltammetry	0.5−7 mM	100 μM	2
CoOOH NSs	Colorimetric	33 μM−1.3 mM	13.7 μM	3
Naphthalene derivative containing piazselenole (NDP)	Colorimetric	0−80 mM	0.178 mM	4
Ag_2SQD/MnO_2 NS	Fluorescence	0.3−1.2 mM	60 μM	5
N-CQDs-MnO_2 NTs	**Fluorescence**	**3.3-23.3μM**	**4.70 μM**	**This work**

Table S2: Comparison table of LOD values for the CAP by using different sensing probes and techniques.

Sensing probe	**Technique**	**Detection range**	**LOD**	**References**
Hierarchical hollow MnO_2 microspheres (HH-MnO_2)	Colorimetric	4.6–138.1 μM	1.2 μM	6
-	Circular-disc spectroscopy	10−70 μg mL^{-1}	2.38 μg mL^{-1}	7
Hydroxypropyl β-cyclodextrin cross-linked polymer (HP-CDP)	Fluorometric	9.2×10^{-7} - 4.6×10^{-4} M	1.8×10^{-7} M	8
N-CQDs-MnO_2 NTs	**Fluorescence**	**3.3-30.0μM**	**5.22 μM**	**This work**

References

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