Supporting Information for

Epigynum auritum-Derived Near-Infrared Carbon Dots for Bioimaging and Antimicrobial Applications

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The following are included as supporting information for this paper:

Total 4 Pages, 3 Figures.

Figures S1–S3:

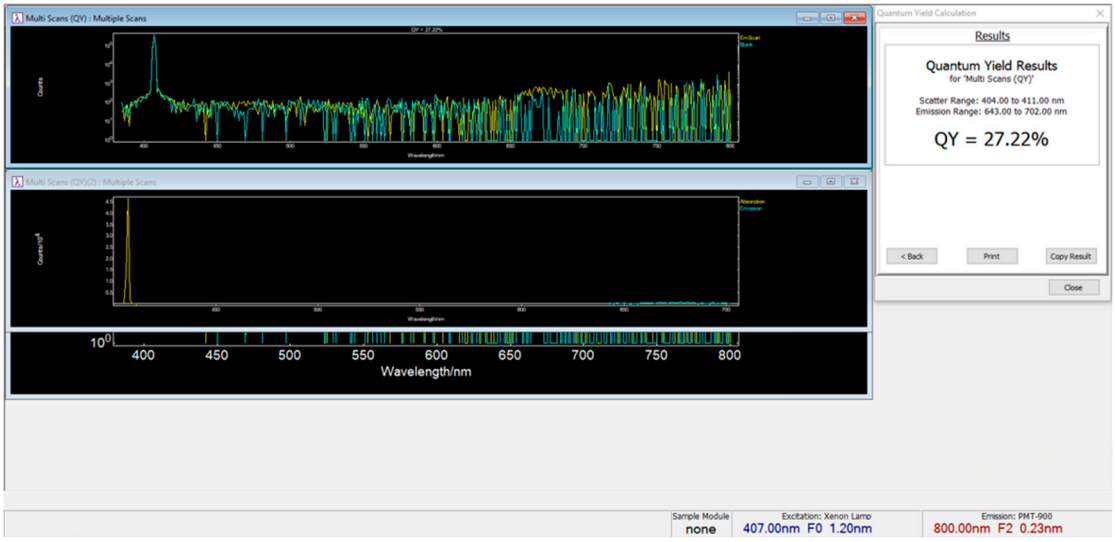


Figure S1. The absolute PLQY of NIR-CDs in acetone solution under the excitation wavelength of 409 nm.

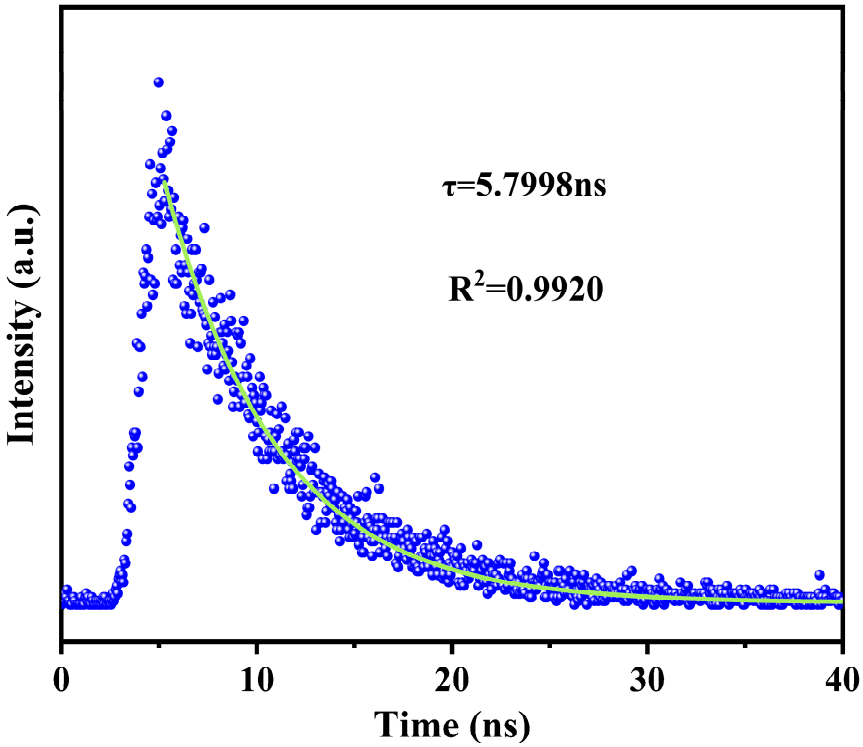


Figure S2. Time-resolved decay spectrum of the NIR-CDs.

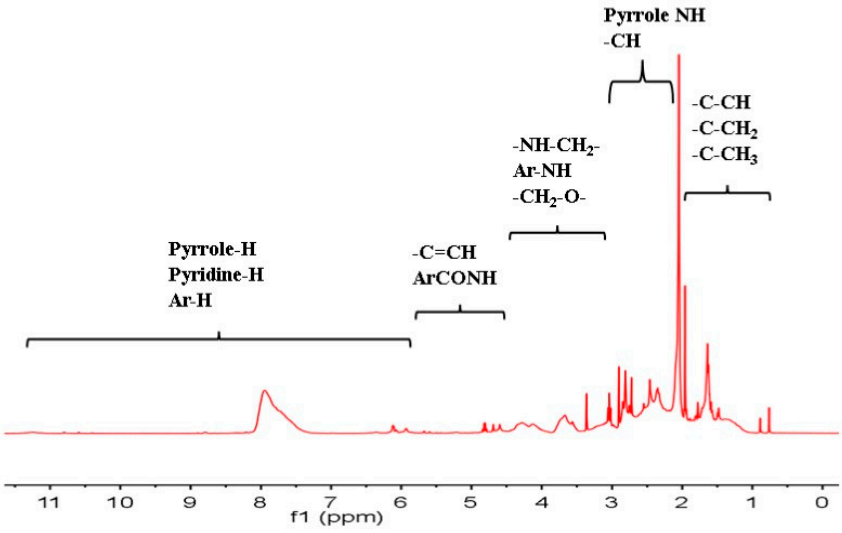


Figure S3. ^{1}H NMR spectra of of the NIR-CDs.

Table S1. Comparison of antibacterial activity attained in the present work with that of some other quantum dots.

Samples	Bacterial species	MIC (μg/mL)	Reference
N、Zn-CDs	*E. coli*	1000μg/mL	[1]
Epigynum auritum-NIR-CDs	*E. coli*	62μg/mL	This Work
HCDs	*E. coli*	20μg/mL	[2]
F-CDs	*E. coli*	64μg/mL	[3]
Lys-CQDs	*E. coli*	62.5μg/mL	[4]
F-CDs	*S. aureus*	128μg/mL	[3]
Curcumin QDs	*S. aureus*	15.6μg/mL	[5]
Lys-CQDs	*S. aureus*	31.25μg/mL	[4]
Epigynum auritum-NIR-CDs	*S. aureus*	8μg/mL	This Work

1. Das, P.; Ganguly, S.; Bose, M.; Mondal, S.; Choudhary, S.; Gangopadhyay, S.; Das, A. K.; Banerjee, S.; Das, N. C., Zinc and nitrogen ornamented bluish white luminescent carbon dots for engrossing bacteriostatic activity and Fenton based bio-sensor. *Materials Science and Engineering: C* **2018**, 88, 115-129.
2. Razavi, R.; Tajik, H.; Molaei, R.; McClements, D. J.; Moradi, M., Janus nanoparticles synthesized from hydrophobic carbon dots and carboxymethyl cellulose: Novel antimicrobial additives for fresh food applications. *Food Bioscience* **2024**, 62, 105171.
3. Liang, J.; Li, W.; Chen, J.; Huang, X.; Liu, Y.; Zhang, X.; Shu, W.; Lei, B.; Zhang, H., Antibacterial Activity and Synergetic Mechanism of Carbon Dots against Gram-Positive and -Negative Bacteria. *ACS Applied Bio Materials* **2021**, 4, (9), 6937-6945.
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