

Electronic Supplementary Information (ESI)

A universal green approach for the synthesis of NPS-codoped carbon quantum dots with enhanced broad-spectrum antibacterial and antioxidant activities

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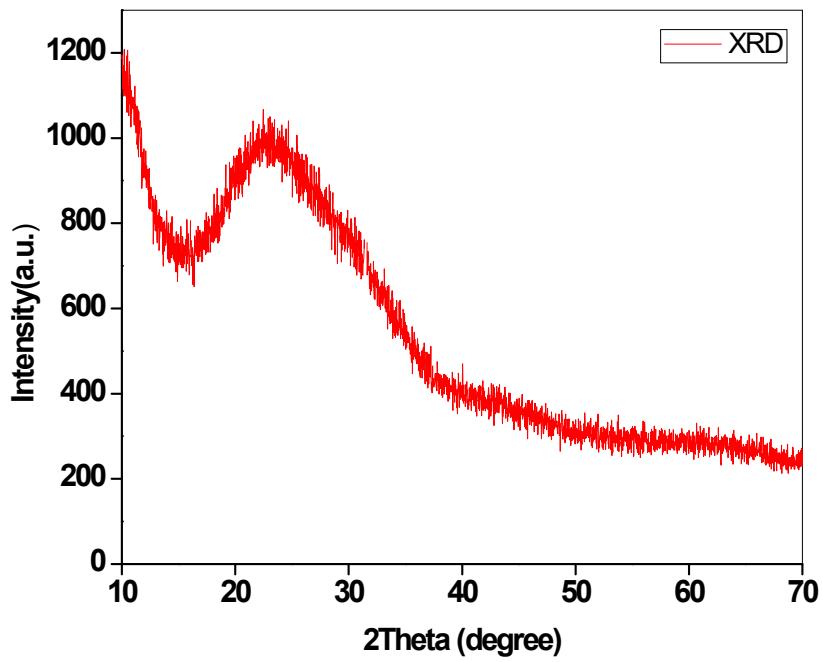


Fig. S1: XRD pattern of the synthesized NPS-codoped CQDs.

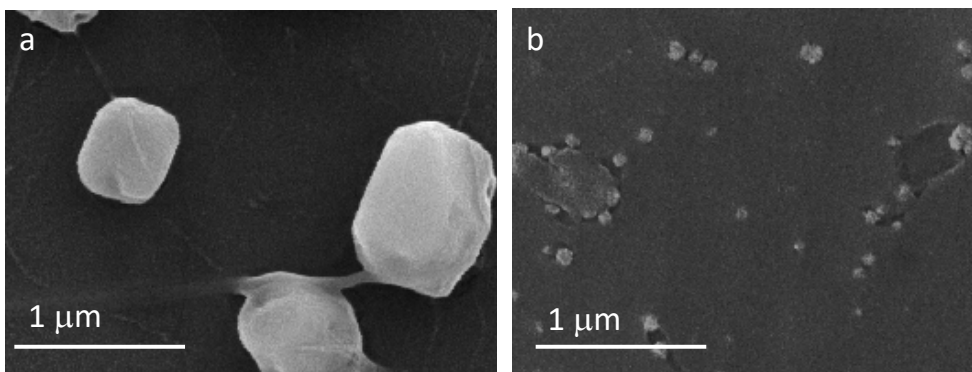


Fig. S2: SEM images of bacteria (a) before and (b) after CQDs treatment.

Table S1: EC50 of different CQDs compared with our work

Carbon dots	Method of synthesis	EC50 ($\mu\text{g/ml}$)	References
F&Cl doped CQDs	Hydrothermal	50 $\mu\text{g/ml}$	1
Citric acid and glutathione derived CDs	Hydrothermal	160 $\mu\text{g/ml}$	2
Coconut husk CDS	Hydrothermal	60 $\mu\text{g/ml}$	3
<i>Carica</i> Papaya leaves based CDs	Hydrothermal	27.6 $\mu\text{g/ml}$	4
Glucose and lysine based CDs	-	570 $\mu\text{g/ml}$	5
Turmeric derived CDs	Hydrothermal	100 $\mu\text{g/ml}$	6
N-S co-doped CDs	Hydrothermal	300 $\mu\text{g/ml}$	7
Endophytic Bacteria-derived CQDs	Hydrothermal	24.78 $\mu\text{g/ml}$	Present work*

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