

Supporting material

Carbon Quantum Dots Derived from Extracellular Polymeric Substance of Anaerobic Ammonium Oxidation Granular Sludge for Detection of Trace Mn(VII) and Cr(VI)

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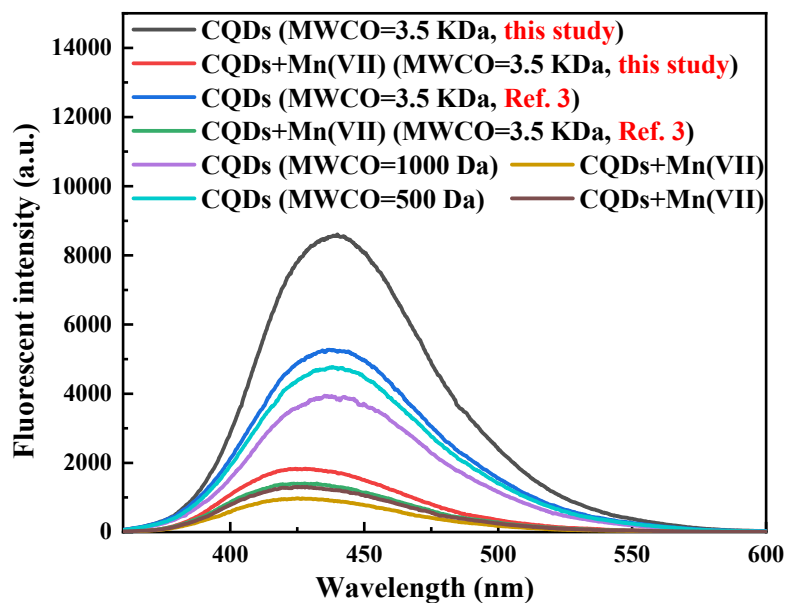


Fig.S1. Fluorescence spectra of different CQDs and their respective products obtained after reactions with Mn(VII) in the PBS buffer solution (pH=7, $\text{NaH}_2\text{PO}_4\text{-Na}_2\text{HPO}_4$).

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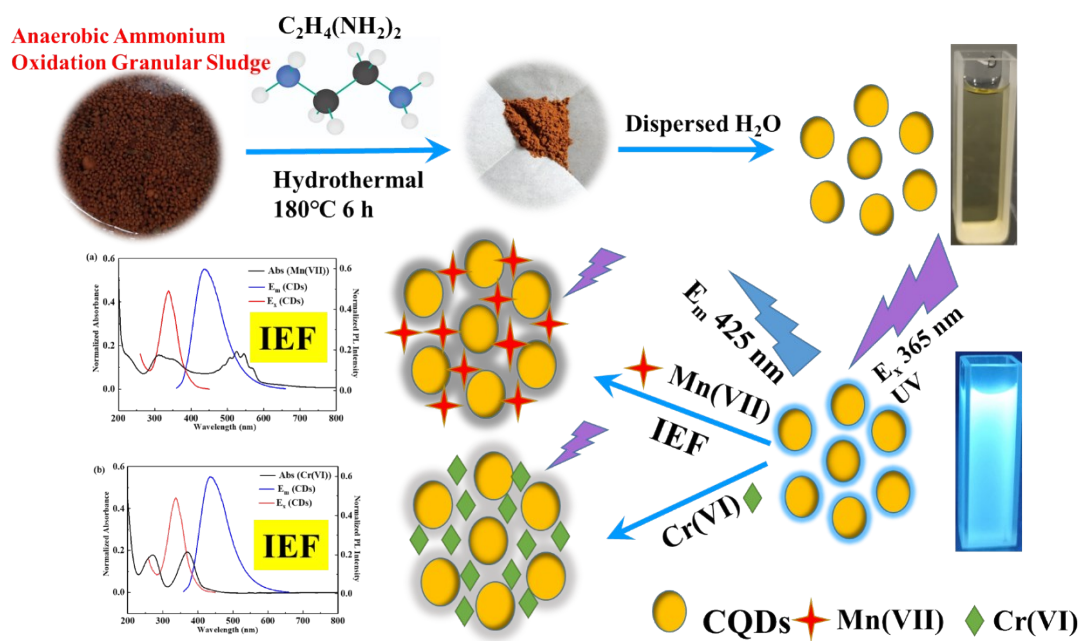


Fig. S2. The schematic flow chart of the preparation method for the synthesis of the carbon quantum dots with the extracellular polymer substances from granular sludge of anaerobic ammonium oxidation.

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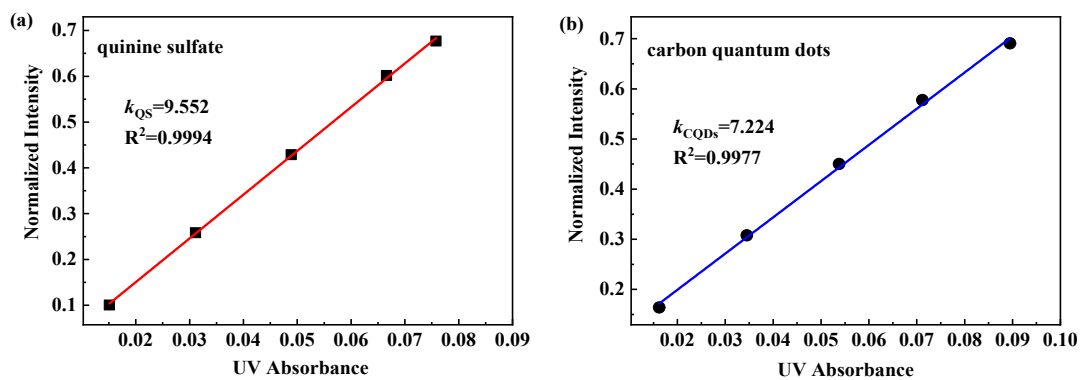


Fig. S3. The normalized intensity as a function of the UV-Vis absorbance with: (a) quinine sulfate as a reference and (b) the carbon quantum dots as target.

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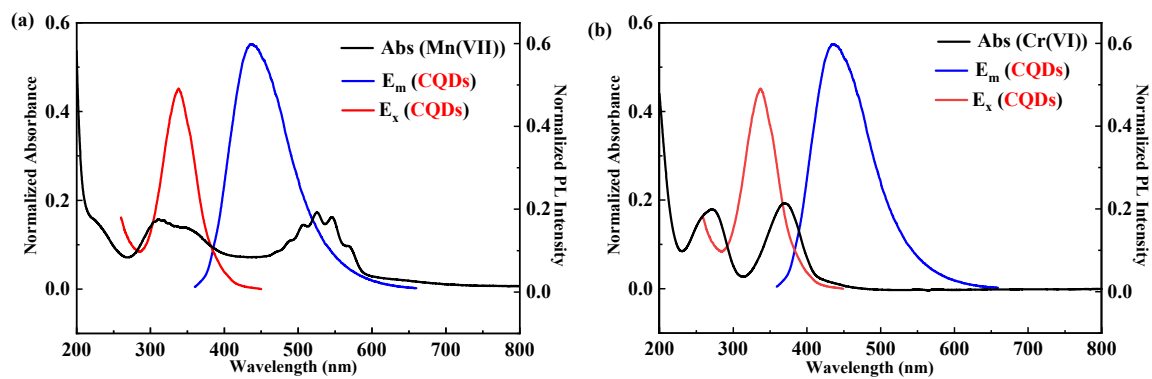


Fig. S4. The normalized UV-Vis absorbance curve and the photoluminescence curve for the excitation and emission of the carbon quantum dots or the Mn(VII) solution.

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Table. S1. The total organic carbon of the EPS extract.

Samples	TOC (mg/mL)	TC (mg/mL)	IC (mg/mL)
1	697.9	716.6	18.66
2	693.5	710.5	19.53
3	688.0	708.0	19.94
Mean \pm SD ^a	693.1 \pm 4.96	711.7 \pm 4.42	19.38 \pm 0.65

^a: Standard deviation.