SUPPORTING INFORMATION

New FeOCl/graphene quantum dots catalyst for peroxymonosulfate activation to efficiently remove organic pollutants and inactivate *Escherichia coli*

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Table S1 Details of the analysis of other pollutants

Chemicals	Methods
ATZ	Measured by HPLC. The mobile phase consisted of methanol and water (v/v, 7:3) at a flow rate of 1 mL/min with the detection wavelength at 254 nm.
BPA	Measured by HPLC. The mobile phase consisted of acetonitrile and water (v/v, 6:4) at a flow rate of 0.8 mL/min with the detection wavelength at 280 nm.
OPP	Measured by HPLC. The mobile phase consisted of acetonitrile and water (v/v, 6:4) at a flow rate of 0.8 mL/min with the detection wavelength at 254 nm.
RIF	Measured by UV-vis with the detection wavelength at 473 nm.

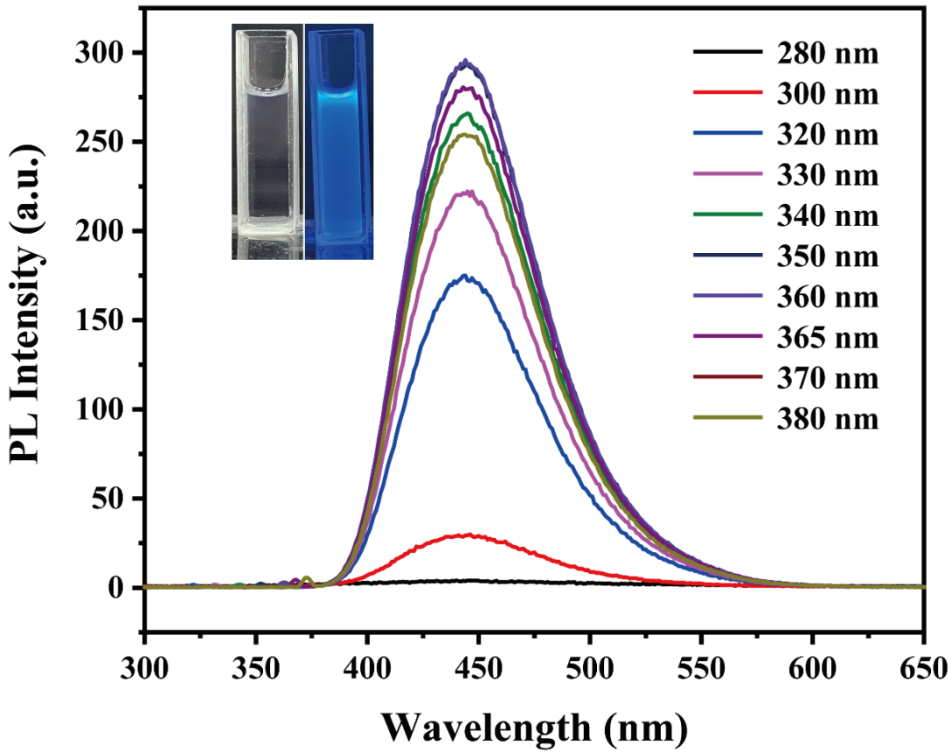

Fig.S1. The photoluminscent (PL) spectra of GQDs under different excitation wavelengths of 280–380 nm. The insets are optical images of the GQDs aqueous solution excited by 365nm.

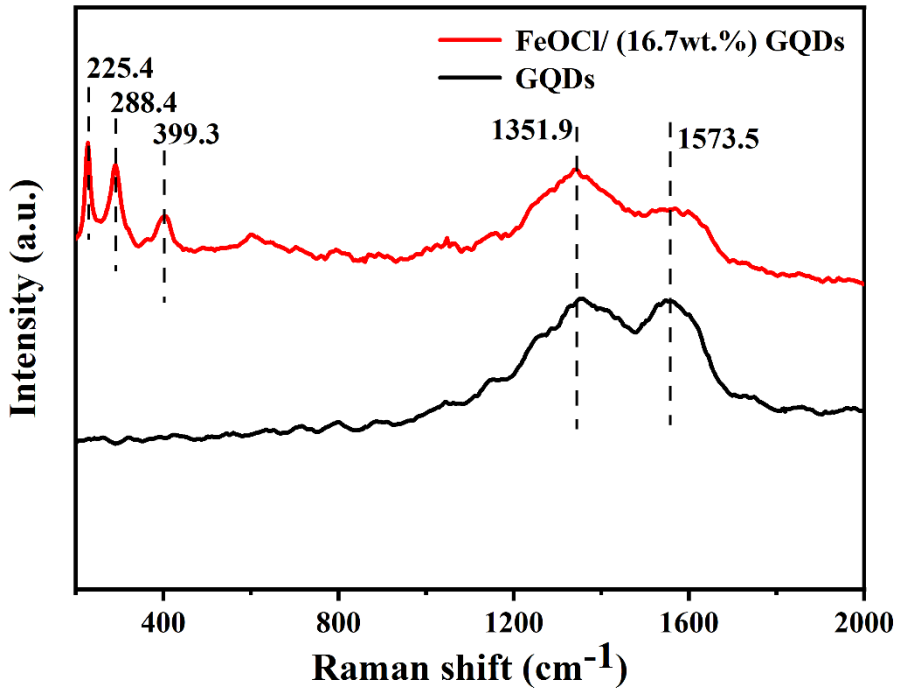

Fig.S2. Raman spectra of GQDs and FeOCl/ (16.7wt.%) GQDs.

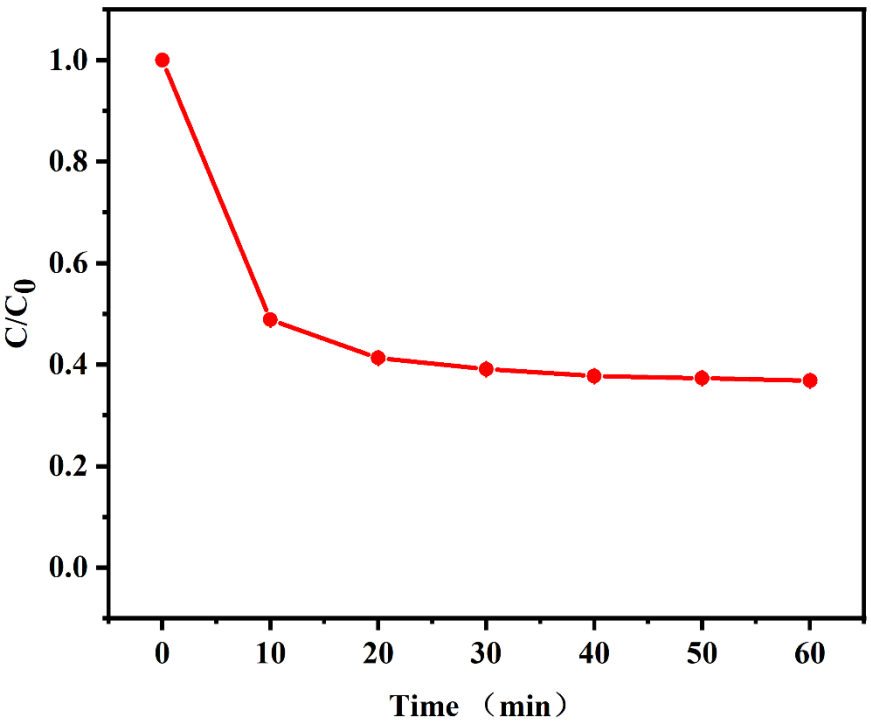

Fig.S3. Degraded 50 mg L^{-1} RhB in 60 min. (Reaction conditions: initial pH=5.7, temperature = 25 °C, [RhB]=50 mg L^{-1}, [Catal]=0.2 g L^{-1}, [PMS]=0.2 mM.)

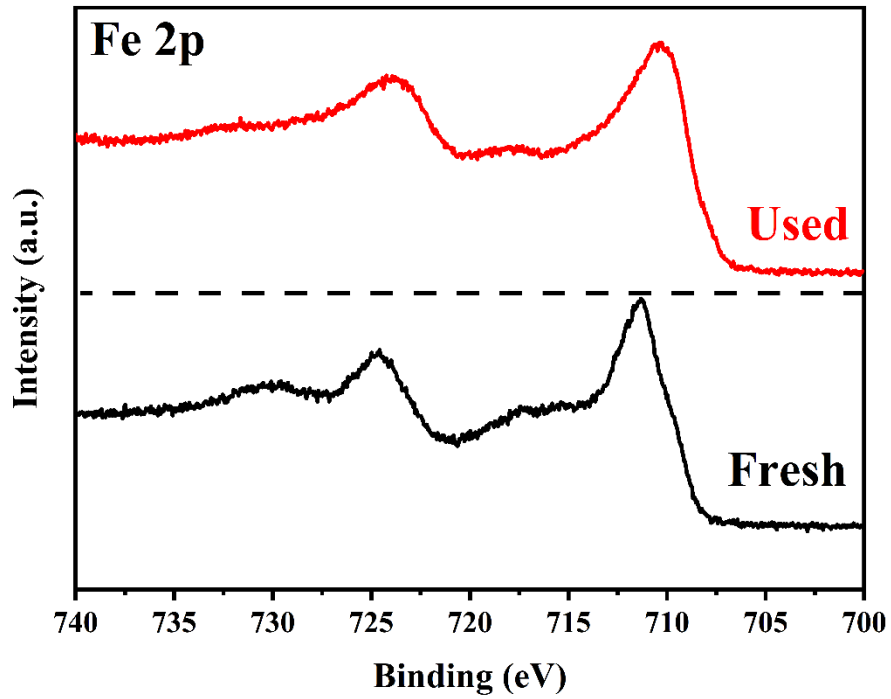

Fig.S4. High resolution XPS spectra of Fe 2p of fresh FeOCl/ (16.7wt.%) GQDs and used FeOCl/ (16.7wt.%) GQDs.

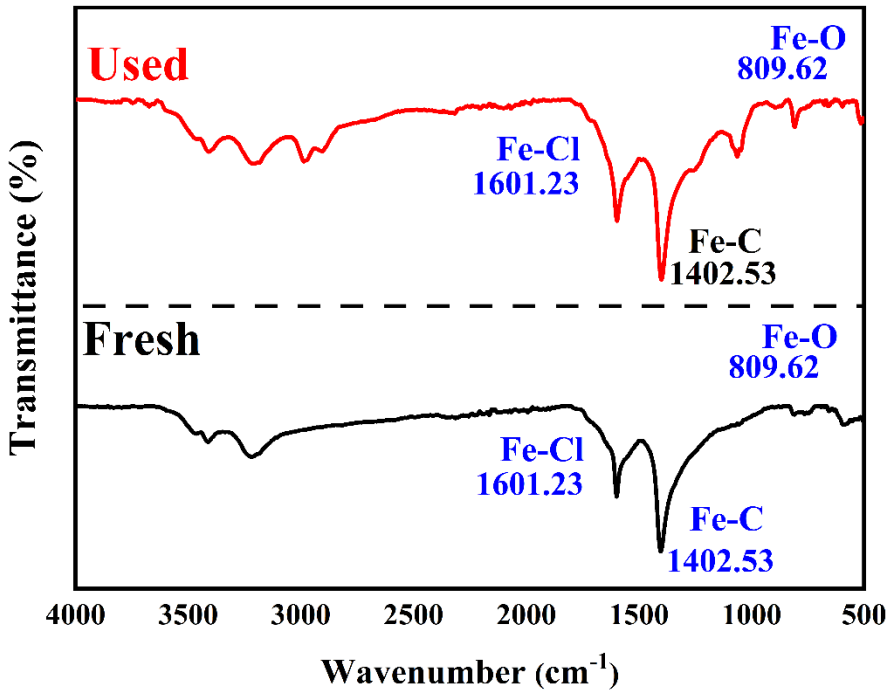

Fig.S5. FTIR spectra of fresh FeOCl/ (16.7wt.%) GQDs and used FeOCl/ (16.7wt.%) GQDs.

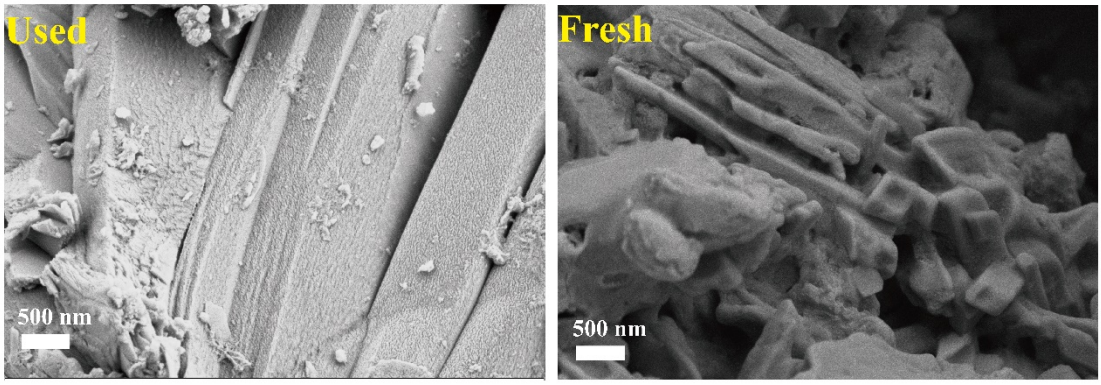

Fig.S6.SEM of fresh FeOCl/ (16.7wt.%) GQDs and used FeOCl/ (16.7wt.%) GQDs.