

## **Polyethylenimine Functionalized Graphene Quantum Dots for Cd<sup>2+</sup> ions Adsorption**

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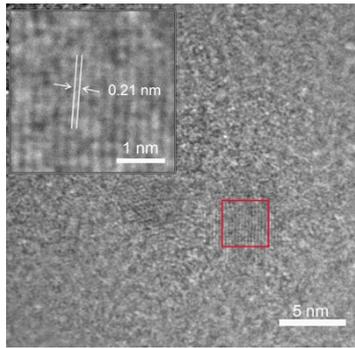


Fig. S1 HRTEM images of graphene quantum dots

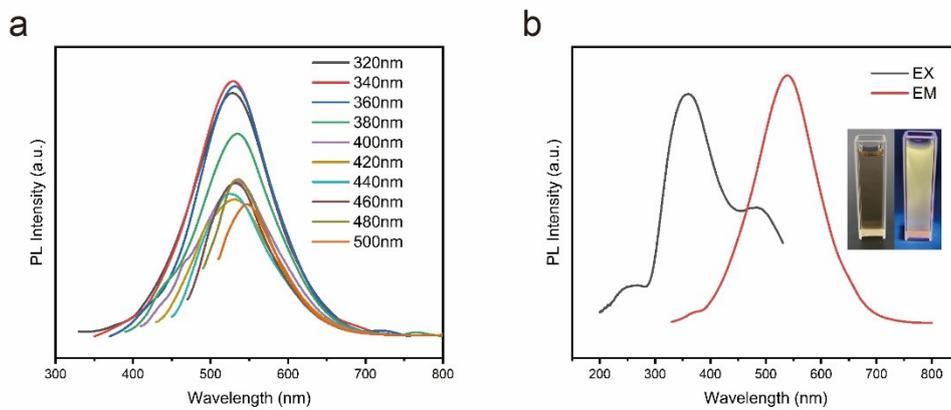


Fig. S2 (a) Fluorescence emission spectra of GQDs with different excitation wavelengths from 320 nm to 500 nm. (b) excitation and emission spectra of GQDs, inset: images of GQDs aqueous solutions under daylight (left) and UV (right).

Table S1 Thermogravimetric data analysis table

Sample	GQDs (mg)	PEI (mg)	Molar ratio (GQD:PEI)	PEI doping ratio (%)	
GQDs-PEI <sub>(600)</sub>	10	100	1:10	<del>41</del>	43
GQDs-PEI <sub>(600)</sub>	10	150	1:15	<del>49</del>	45
GQDs-PEI <sub>(600)</sub>	10	200	1:20	<del>55</del>	49
GQDs-PEI <sub>(1800)</sub>	10	200	1:20	<del>54</del>	48