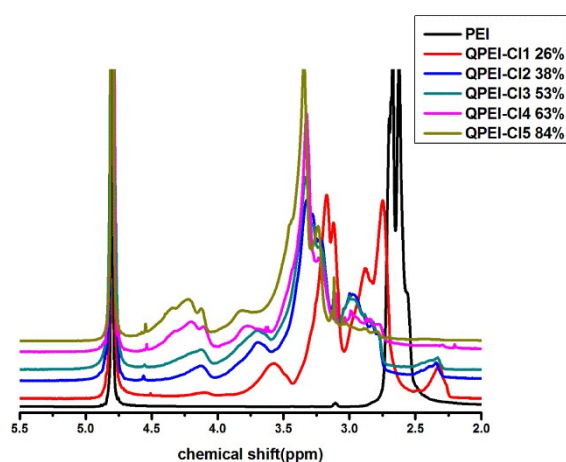


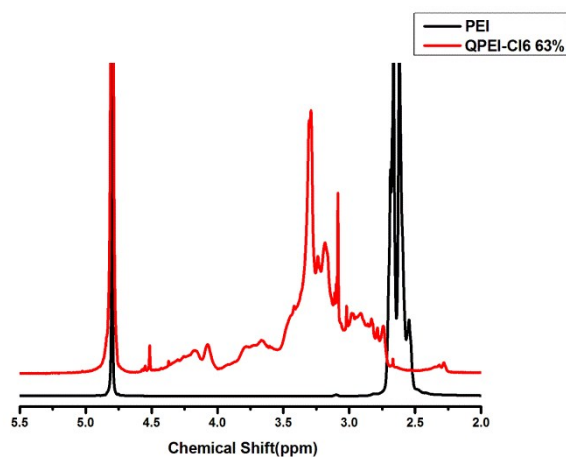
## Supporting Information

### Synthesis of Paramagnetic Polymers Based on Polyethyleneimine(PEI)

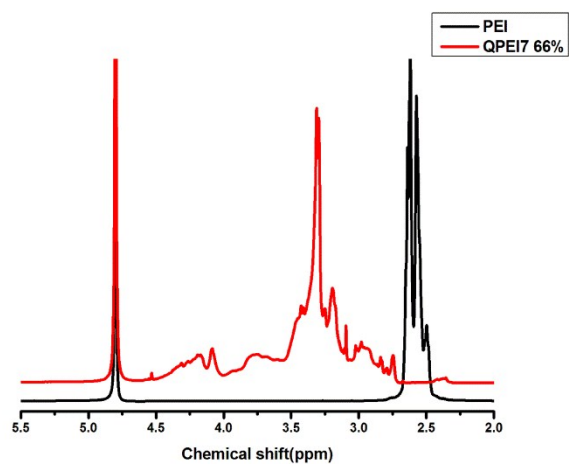
Xiaolong Yu, Xiaoyan Yuan, Yunhui Zhao, Lixia Ren\*



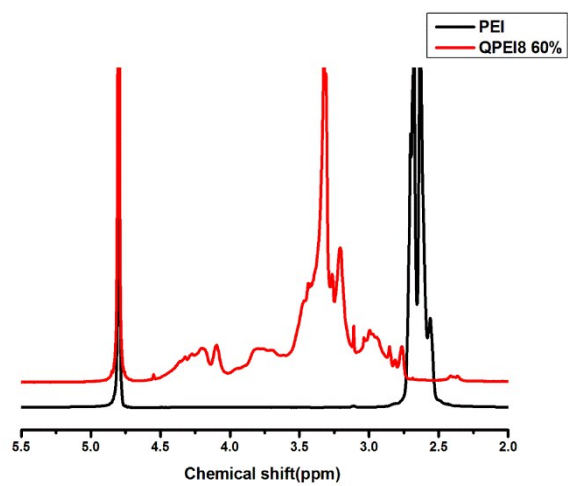
**Fig. S1.** <sup>1</sup>H-NMR spectra of linear PEI (Mw 10k) and corresponding QPEIs in D<sub>2</sub>O.



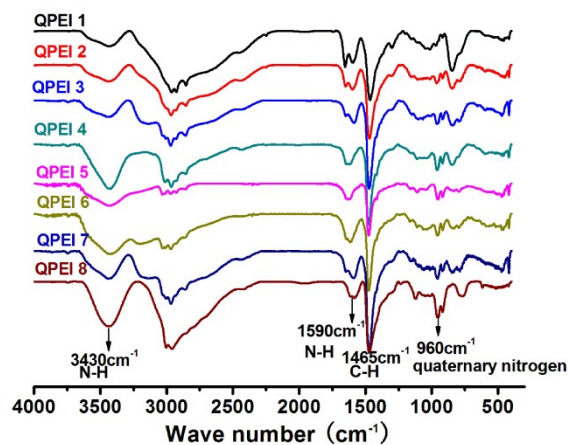
**Fig. S2.** <sup>1</sup>H-NMR spectra of linear PEI (Mw 1.8k) and corresponding QPEI in D<sub>2</sub>O.



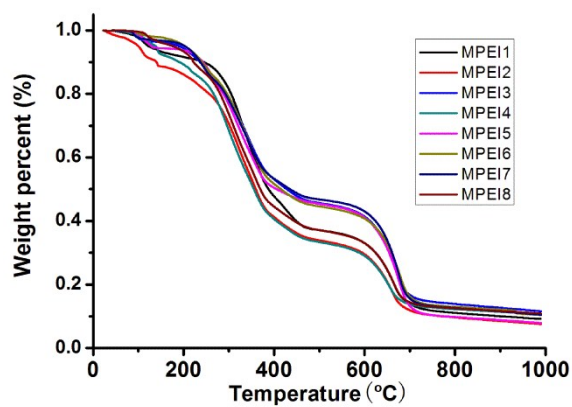
**Fig. S3.** <sup>1</sup>H-NMR spectra of linear PEI (Mw 0.6k) and corresponding QPEI in D<sub>2</sub>O.



**Fig. S4.** <sup>1</sup>H-NMR spectra of branched PEI (Mw 10k) and corresponding QPEI in D<sub>2</sub>O.



**Fig. S5.** FTIR spectra of QPEIs.



**Fig. S6.** TGA curves for PEI based magnetic polymers MPEI1-MPEI8.