## **Supplementary Data**

## Hybrid carbon source for producing nitrogen-doped polymer

## nanodots: one-pot hydrothermal synthesis, fluorescence

## enhancement and highly selective detection of Fe (III)

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Fig.S1 TEM images of PNDs-Sa (A) and PNDs-Sb (B).

Sorial	PNDs from single carbon		QY standarded by quinine sulfate	Maximum excitation
Serial	source		(%)	wavelength
1	Xylose, 0.6 g	Water,	0.55	330nm
		30mL		
2	Glucose, 0.6 g	Water,	0.14	330nm
		30mL		
3	Sucrose, 0.6 g	Water,	1.02	334nm
		30mL		
4	Glycine, 0.6 g	Water,	0.52	332nm
		30mL		
5	Alanine, 0.6 g	Water,	0.57	336nm
		30mL		
6	Phenylalanine,	Water,	1.65	338nm
	0.6 g	30mL		
7	Glycylglycine,	Water,	1.80	340nm
	0.6 g	30mL		
8	BSA, 0.6 g	Water,	0.77	332nm
		30mL		

Table S1. The QYs of PNDs from single sources (In (Teflon)-lined autoclave/150 °C for 50 min).



**Fig.S2** The difference in fluorescence intensity at 425 nm of PNDs dispersion under various concentrations  $[M]^{n+}$  (excitation at 340 nm).



**Fig. S3** TEM image of PNDs-Fe<sup>3+</sup>.