2D coordination polymers based on the interaction between cucurbit[5]uril and light lanthanide metal ions in the presence of copper salts, and use for the detection of nitrogenous bases

Lin Huang [a], Jie Li [a], Ming-Hui Zhang [a], Zhao-Qiang Zhu [a], Kai Chen, [a, *] and Carl Redshaw [b]

[a] Collaborative Innovation Center of Atmospheric Environment and Equipment Technology, Jiangsu Key Laboratory of Atmospheric Environment Monitoring and Pollution Control, School of Environmental Science and Engineering, Nanjing University of Information Science & Technology, Nanjing 210044, P. R. China. Email: kaichen85@nuist.edu.cn or catQchen@163.com (K. Chen)

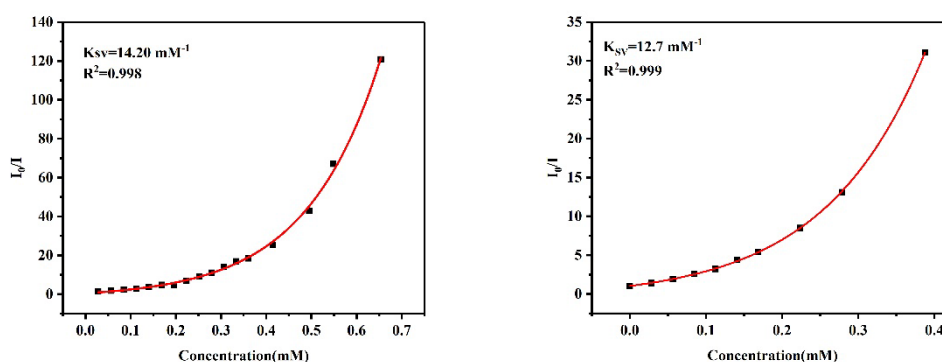[b] Chemistry, School of Natural Sciences, University of Hull, Hull HU6 7RX, UK.
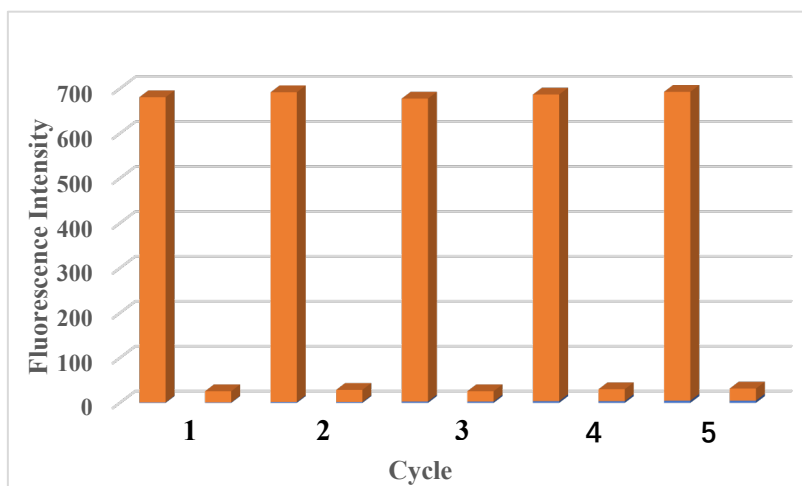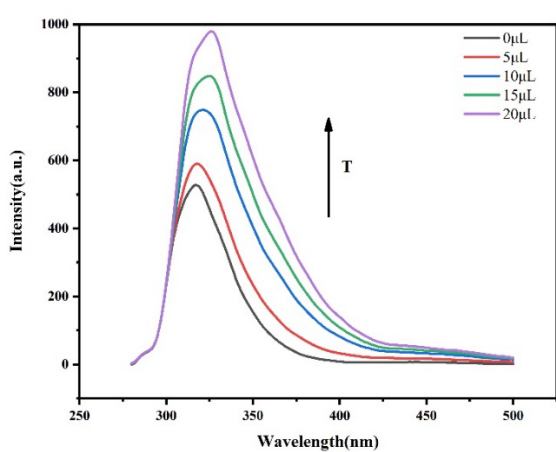
Fig. S1 The fit curve of **A** and **U**.
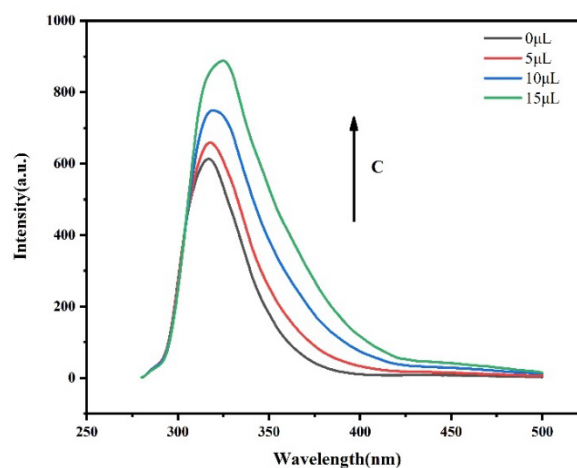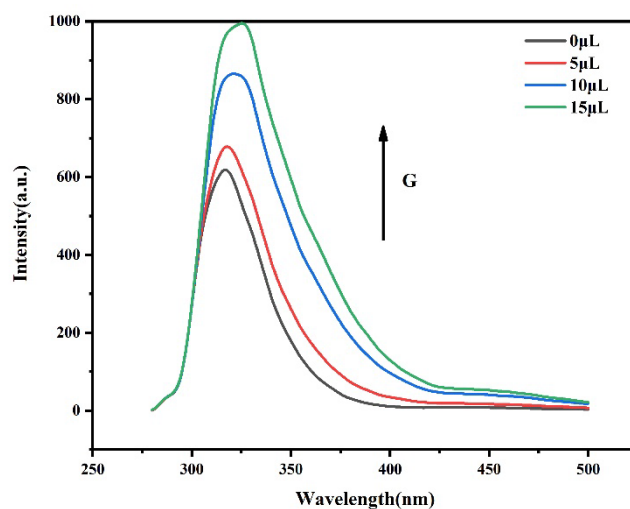
Fig. S2 Fluorescence quenching and recyclability test for **1**.

(a)

(b)

(c)

Fig. S3. Fluorescence enhancement of **1** dispersed in water upon addition of **T**(a), **C**(b), and **G**(c).

Table S1. Standard deviation and detection limit calculation for **A** and **U**.

		A	U
	1	874.0613	858.1628
	2	872.4453	852.3751
NO.	3	871.1987	860.4659
	4	873.6598	853.9072
	5	875.4375	859.0945
Standard deviation(σ)		1.442606	3.114764
Slope (m)		14.2	12.7
Detection limit (3σ/m, mM)		0.304776	0.340773