Supporting information

Table S1 Selected hydrogen bonds lengths [Å] and angles [°] for **1-3**.

Donor-H···Acceptor	D-H	H···A	D···A	D-H···A
1				
O(1W)-H(1A)···O(3)	0.85	1.87	2.720(4)	173
O(1W)-H(1B)···F(3)	0.85	2.55	3.098(8)	123
O(2W)-H(2B)···O(1W)	0.85	1.94	2.769(6)	165
2				
C(2)-H(2)···F(2)	0.95	2.21	3.154(2)	175
C(5)-H(5)···F(5)	0.95	2.35	3.278(8)	167
C(10)-H(10)···F(6)	0.95	2.44	3.341(0)	158
C(15)-H(15)···F(3)	0.95	2.35	3.278(3)	166
3				
O(1)-H(1A)···F(5)	0.85	2.05	2.889(4)	170
O(1)-H(1B)···F(5)	0.85	2.34	2.889(4)	123
C(7)-H(7)···F(1)	0.93	2.40	3.306(3)	163
C(9)-H(9)···F(5)	0.93	2.42	3.332(3)	168

Table S2 Different dihedral angles (°) between triazole rings and aromatic pyridine rings of L_1 and L_2 for **1-3**.

	Dihedral angles between triazole and aromatic pyridine rings f L_1 and L_2 (°)
1	4.12(1)
2	4.35(6)
3	26.39(9)

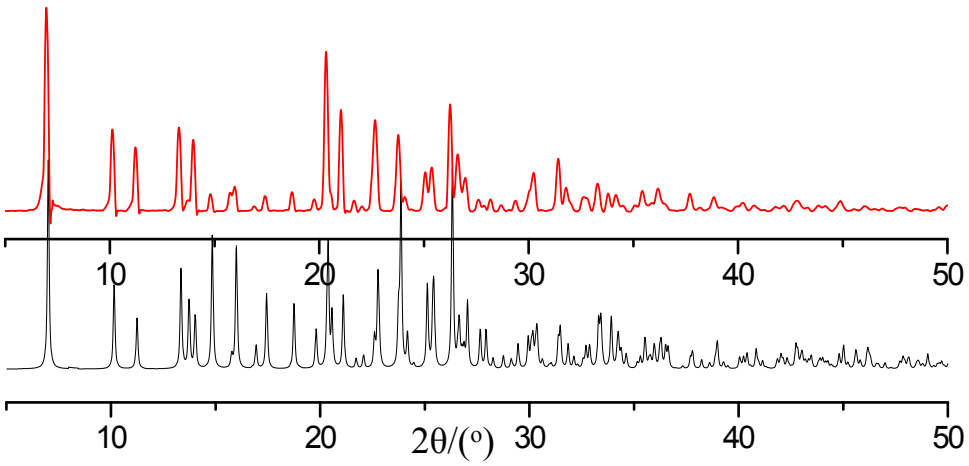

Fig. S1 Powder X-ray diffraction (PXRD) patterns of **1** (black for calculated and red for experimental ones).

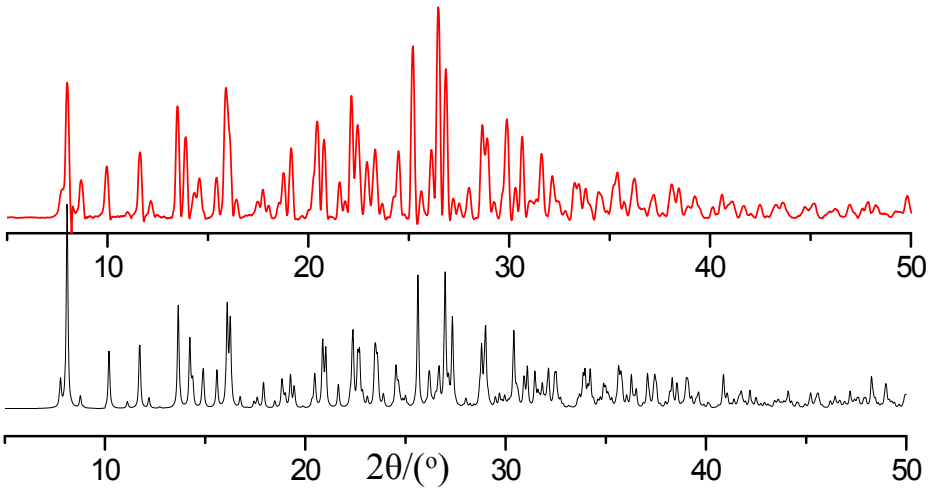

Fig. S2 Powder X-ray diffraction (PXRD) patterns of **2** (black for calculated and red for experimental ones).

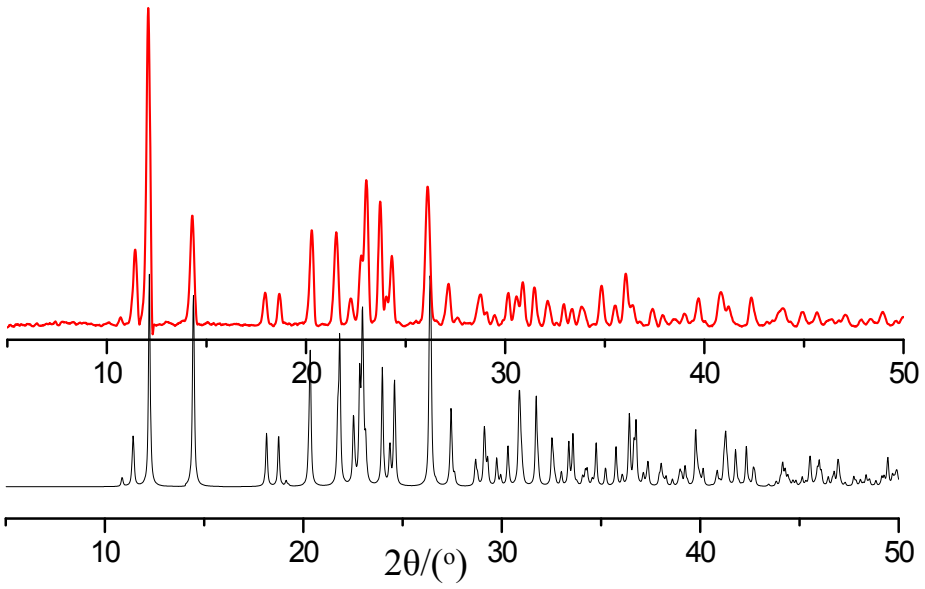

Fig. S3 Powder X-ray diffraction (PXRD) patterns of **3** (black for calculated and red for experimental ones).

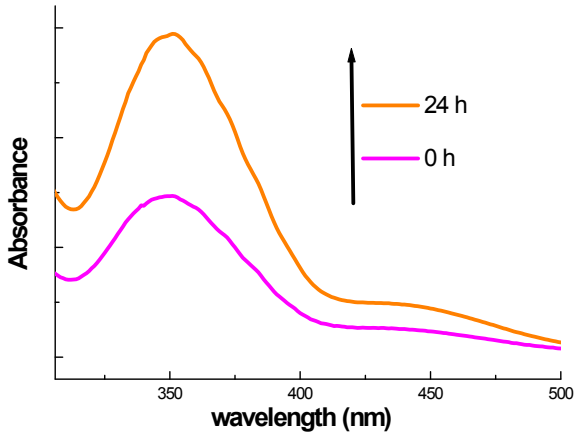

Fig. S4 UV-vis adsorption spectra of dichromate exchange samples of **2** were added into 50-fold molar amounts of $NaClO_4$.

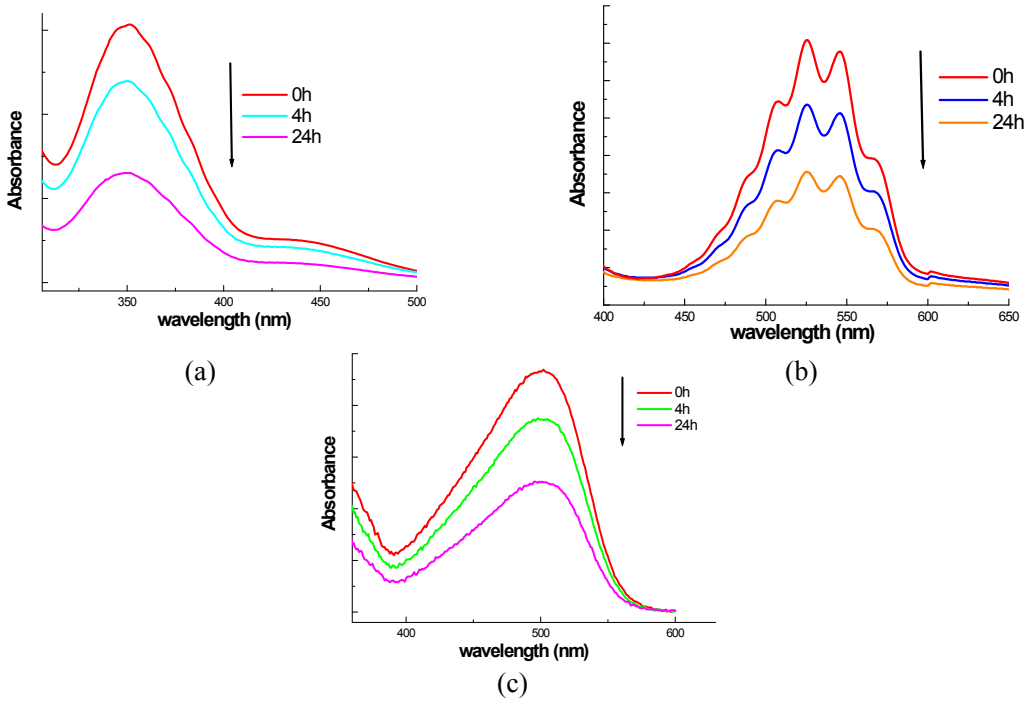

Fig. S5 UV-vis adsorption spectra of (a) $K_2Cr_2O_7$ aqueous solution with addition of **3**; (b) $KMnO_4$ aqueous solution with addition of **3**; (c) congo red methanol solution with addition of **3.**

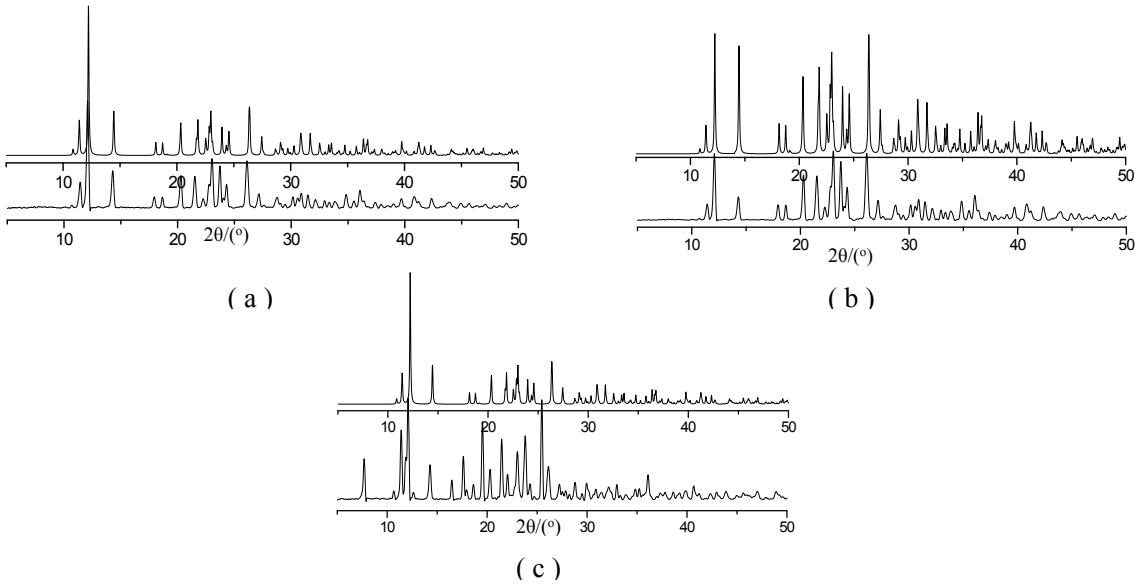

Fig. S6 PXRD patterns for (a) as-synthesized **3** (top) and anion-exchanged samples of **3** with $K_2Cr_2O_7$ (bottom); (b) as-synthesized **3** (top) and anion-exchanged samples of **3** with $KMnO_4$ (bottom); (c) as-synthesized **3** (top) and anion-exchanged samples of **3** with congo red (bottom).