

Structure, Sensing and Photocatalytic Properties of two Multifunctional 3D Luminescent Coordination Polymer Based on N-heterocyclic carboxylic acid

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Table. S1 Selected Bond lengths [Å] and angles [°] for complexes **1** and **2**

Complex 1		Complex 2	
Zn1-O1	1.942(2)	Zn1-O1	1.969(6)
Zn1-O4	1.951(2)	Zn1-O4	1.972(7)
Zn1-N5	2.004(3)	Zn1-N7	2.034(4)
Zn1-N7	2.018(3)	Zn1-N4	2.005(4)
O1-Zn1-O4	100.58(11)	N7-Zn1-O1	96.6(2)
O1-Zn1-N5	116.30(11)	N7-Zn1-O4	97.8(2)
O1-Zn1-N7	105.84(12)	N7-Zn1-N4	104.39(18)
N5-Zn1-O4	112.17(12)	O4-Zn1-O1	114.6(3)
N7-Zn1-O4	111.33(11)	O4-Zn1-N4	124.0(3)

Symmetry codes for **1**: (i) $x-1/2, -y+2, z+1/2$; (ii) $x-1, y, z$; (iii) $x+1/2, -y+2, z-1/2$; (iv) $x+1, y, z$.

Symmetry codes for **2**: (i) $x, -y+2, z-1/2$; (ii) $x+1/2, y-1/2, z$; (iii) $x, -y+2, z+1/2$; (iv) $x-1/2, y+1/2, z$.

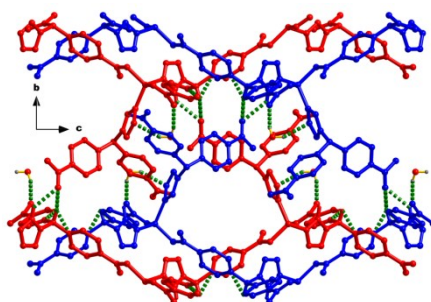


Fig. S1 The 2D \rightarrow 3D supramolecular network through O-H...O and C-H...O bonds.

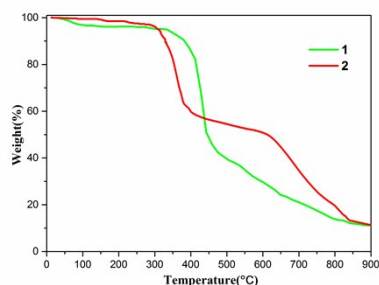


Fig.S2 TG curve of complexes **1** and **2**.

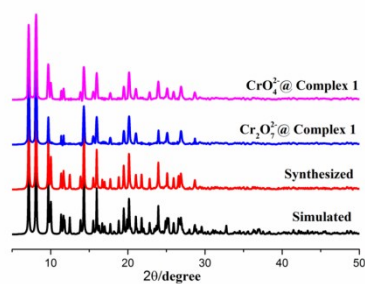


Fig. S3 Powder XRD pattern of complex 1

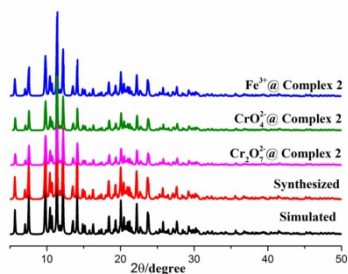


Fig. S4 Powder XRD pattern of complex 2

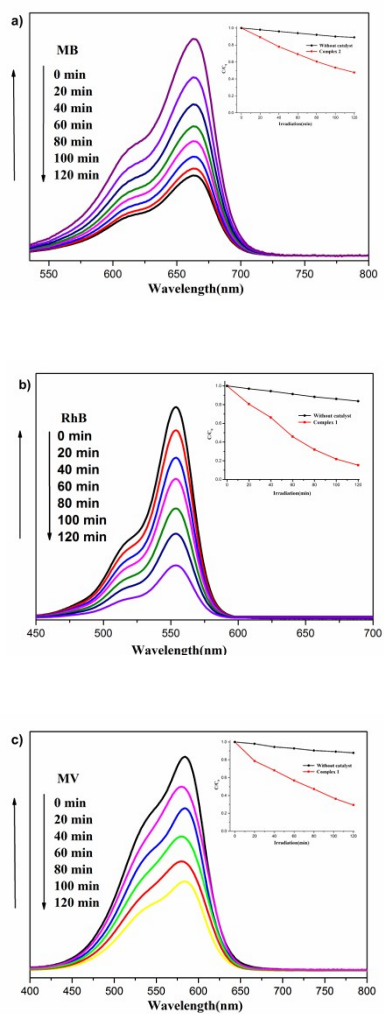


Fig. S5 (a) Absorption spectra of the MB solution in the presence of complex 2. (b) Absorption

spectra of the RhB solution in the presence of complex **1**. (c) Absorption spectra of the MV solution in the presence of complex **1**.

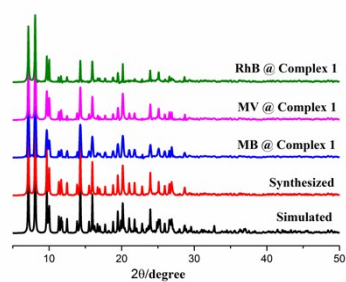


Fig. S6 PXRD patterns of complex **1** before and after photocatalysis process.

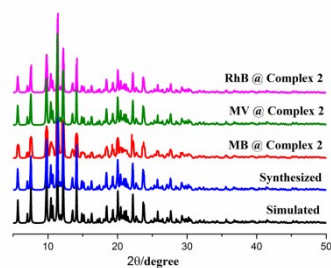


Fig. S7 PXRD patterns of complex **2** before and after photocatalysis process.