

Electronic Supplementary Material (ESI) for New Journal of Chemistry.

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Supplementary Information

A 3D cadmium–vanadium bimetallic framework with luminescence properties

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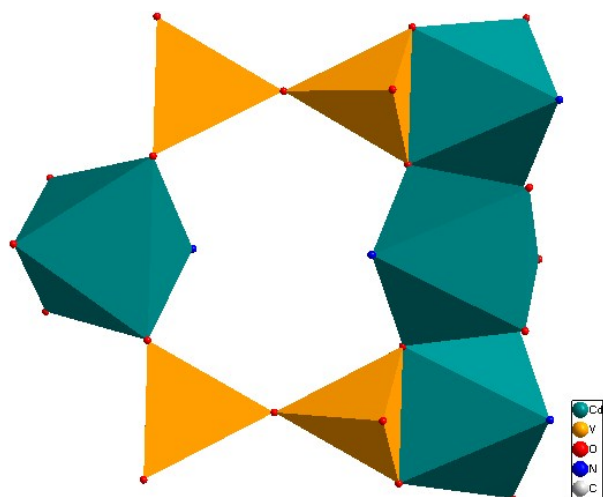


Fig. S1. The 3D topology of bimetallic framework for **1** (color code: VO_4 tetrahedron, yellow; CdO_5N octahedron, teal).

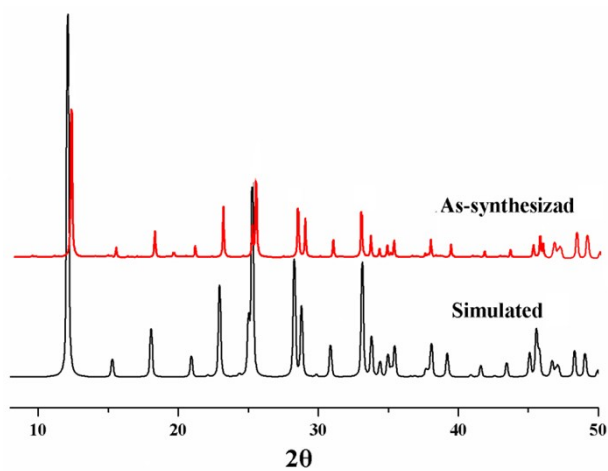


Fig. S2. PXRD patterns of solids **1** (black: calculated; red: as-synthesized sample, showing the powder product is in good agreement with the calculated pattern from the single-crystal X-ray diffraction).

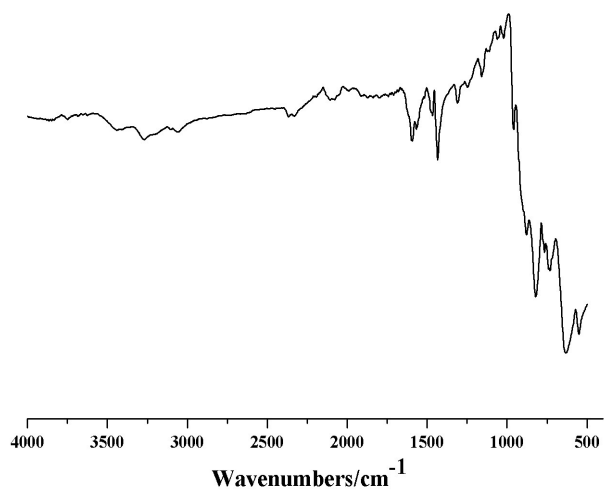


Fig. S3. The IR spectra of **1** from 4000-400 cm⁻¹.

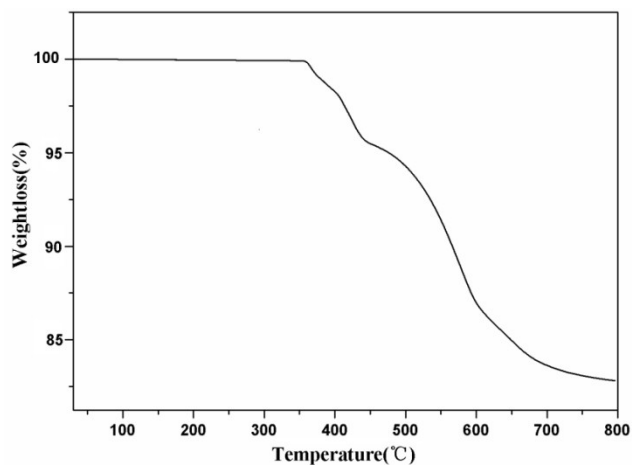


Fig. S4. The thermogravimetric (TG) curves of **1** measured from 30 to 800 °C under N₂ atmosphere with the heating rate of 10 °C/min.

Table S1. Bond-valence sum calculations for **1**.

Bonds	Bond length (Å)	BVS	Bonds	Bond length (Å)	BVS
V(1)-O(2)	1.707(2)	1.207	Cd(1)-O(1)	2.249(3)	0.334
V(1)-O(2)#2	1.707(2)	1.207	Cd(1)-O(2)	2.506(2)	0.167
V(1)-O(1)#4	1.667(3)	1.434	Cd(1)-O(2)#1	2.268(2)	0.317
V(1)-O(3)	1.7867(9)	0.996	Cd(1)-O(2)#2	2.506(2)	0.167
			Cd(1)-O(2)#3	2.268(2)	0.317
			Cd(1)-N(1)	2.255(4)	0.450
sum		4.944	sum		1.852