Electronic Supplementary Information for Dalton Transactions

Supplementary information

Syntheses, crystal structures, thermal stabilities, luminescence and magnetism of two 3D pillared metal phosphonates

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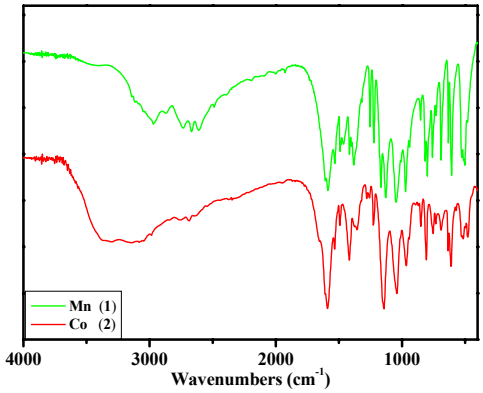

Figure S1. IR curves of compounds **1** and **2**.

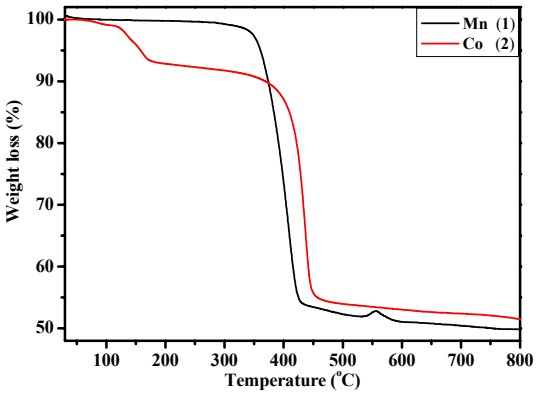

Figure S2. TGA curves of compounds **1** and **2**.

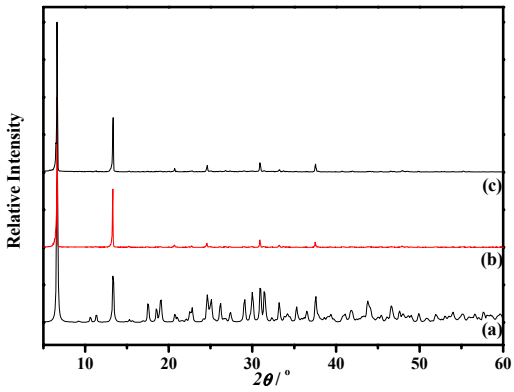

Figure S3. The XRD patterns of compound **1** (a) simulated from X-ray single crystal data, (b) polycrystalline as newly synthesized, and (c) polycrystalline annealed at 300 °C.

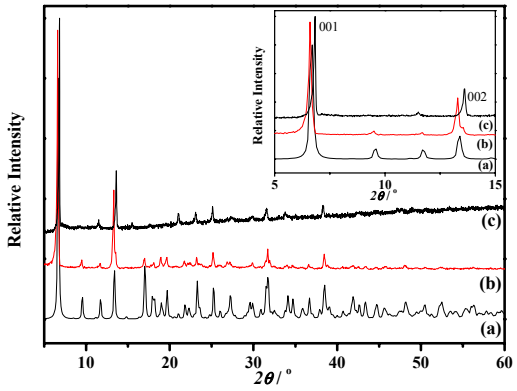

Figure S4. The XRD patterns of compound **2** (a) simulated from X-ray single crystal data, and (b) polycrystalline as newly synthesized, and (c) polycrystalline annealed at 170 °C. The inset is the enlarged portion showing the shifts of the XRD peaks.

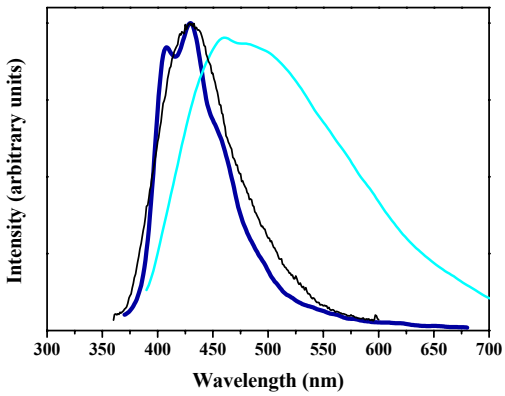

Figure S5. Solid-state emission spectra for compound **1** (purple-blue), H_3L (black) and 4,4'-bipy (blue-green).

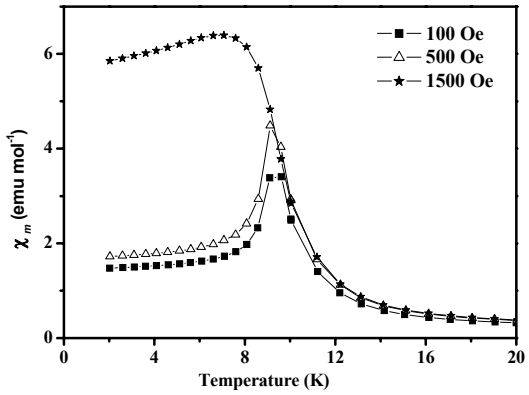

Figure S6. Temperature dependence of the zero field-cooled magnetic susceptibility per Mn3 unit of compound **1**.

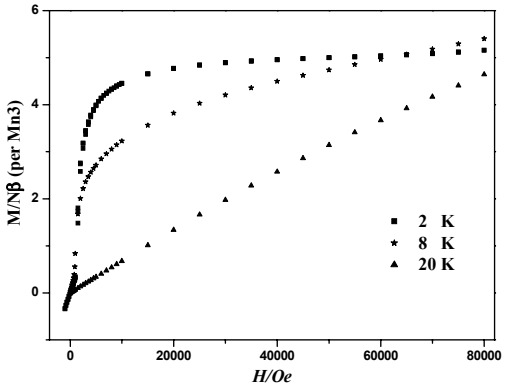

Figure S7. *M* versus *H* curves at 2, 8 and 8 K of compound **1**.