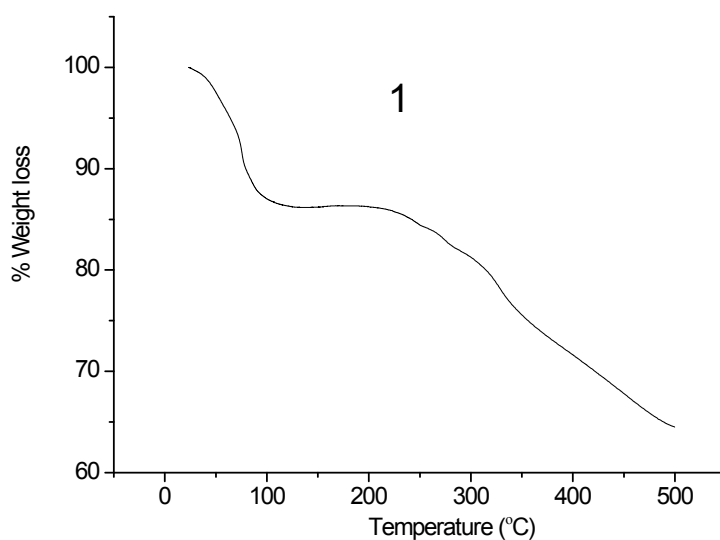


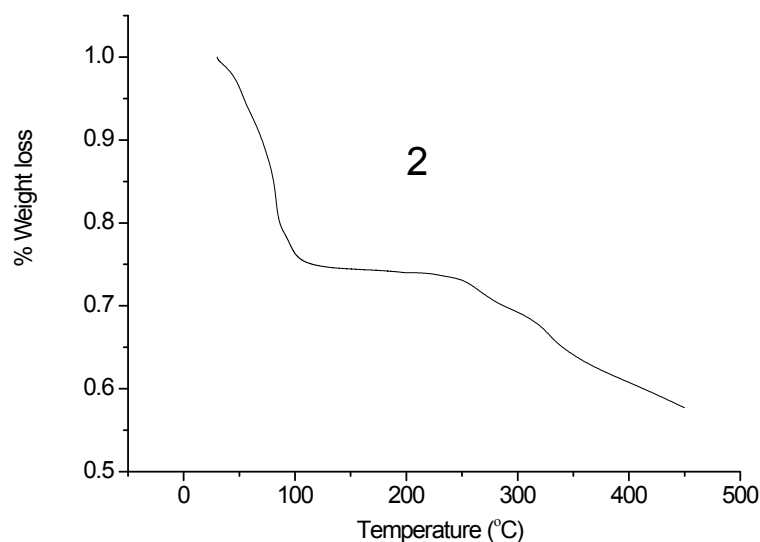
## Supporting Information

### Variations in Topology and Magnetic Properties of Hepta- and Octacyanometallates of Molybdenum with Manganese (II)

Qing-Lun Wang,<sup>a,b</sup> Yuan-Zhu Zhang,<sup>a</sup> Heather Southerland,<sup>a</sup> Andrey V. Prosvirin,<sup>a</sup> Hanhua Zhao<sup>a</sup> and Kim R. Dunbar<sup>\*a</sup>



**Figure S1.** Plot of the TGA data for **1**



**Figure S2.** Plot of the TGA data for **2**.

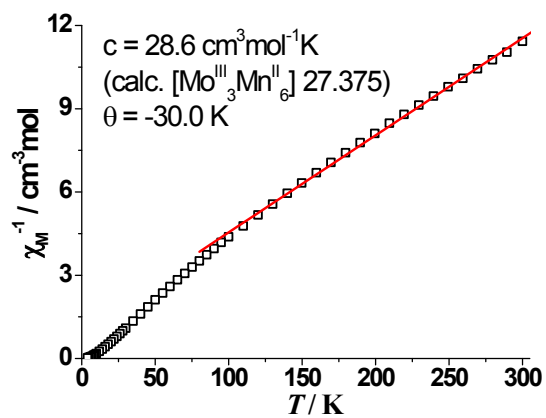


Figure S3. The  $\chi_M^{-1}$  versus  $T$  plot for **1**.

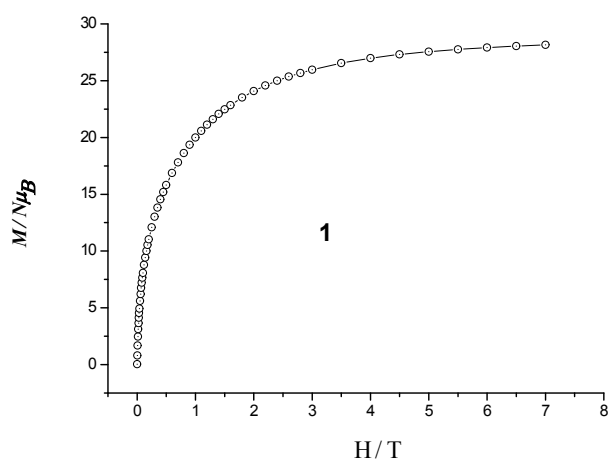


Figure S4. The  $M$  versus  $H / T$  plot at 2.0 K for **1**.

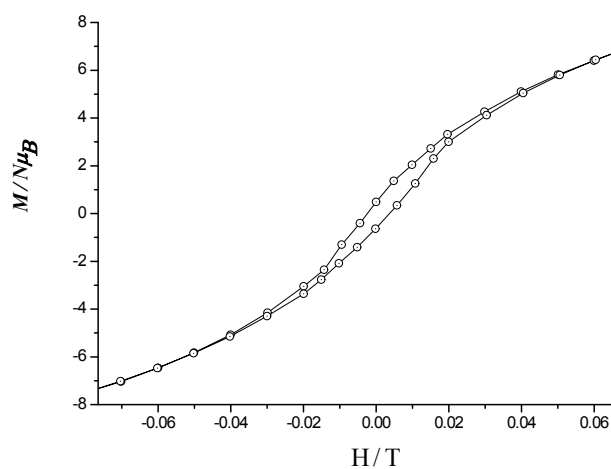
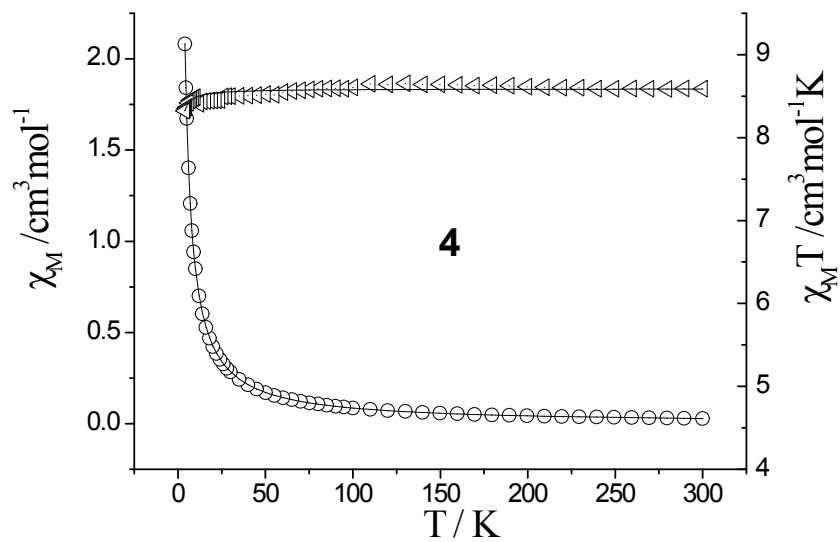
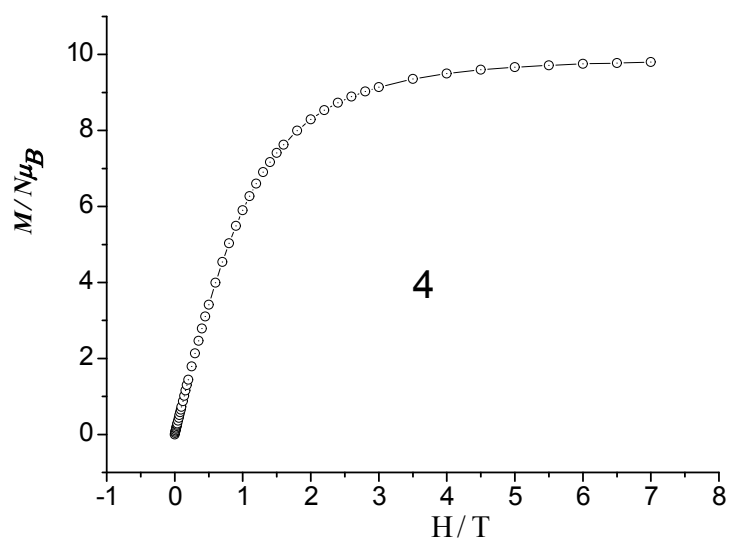


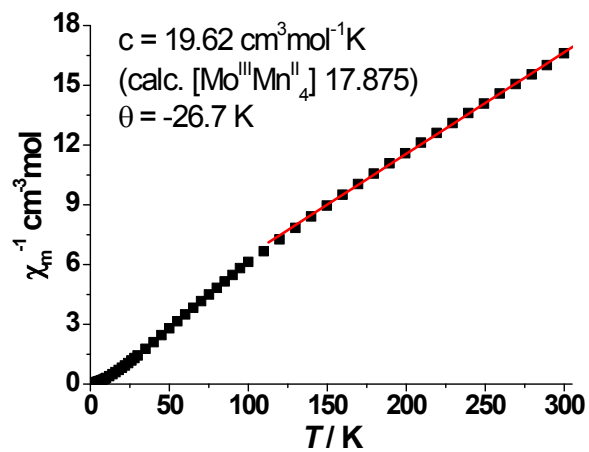
Figure S5. Hysteresis loop at 1.8 K for **1**.



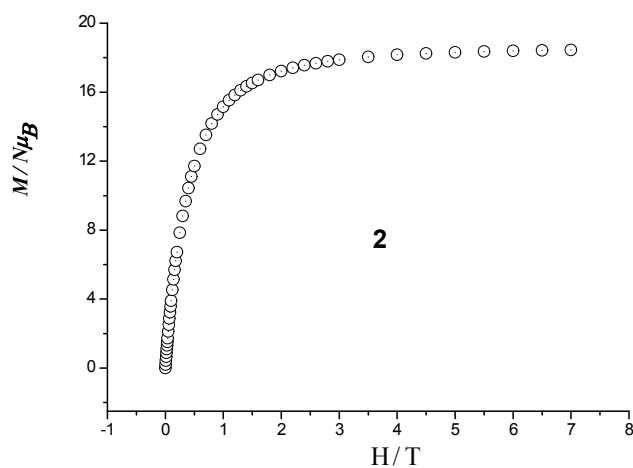
**Figure S6.** The  $\chi_M$  and  $\chi_M T$  versus  $T$  plot for **4** from 300 to 2 K.



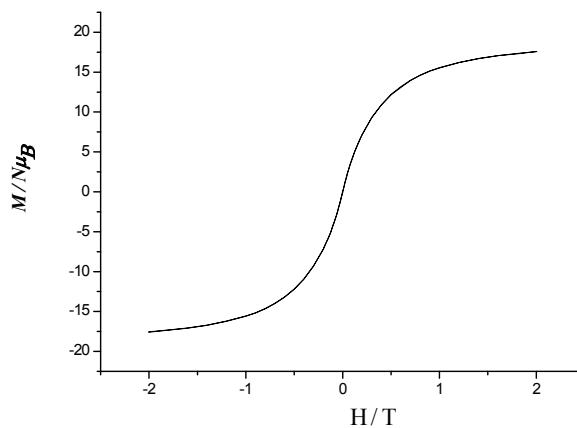
**Figure S7.** Field-dependent magnetization data for **4** ( $T = 2.0 \text{ K}$ ).



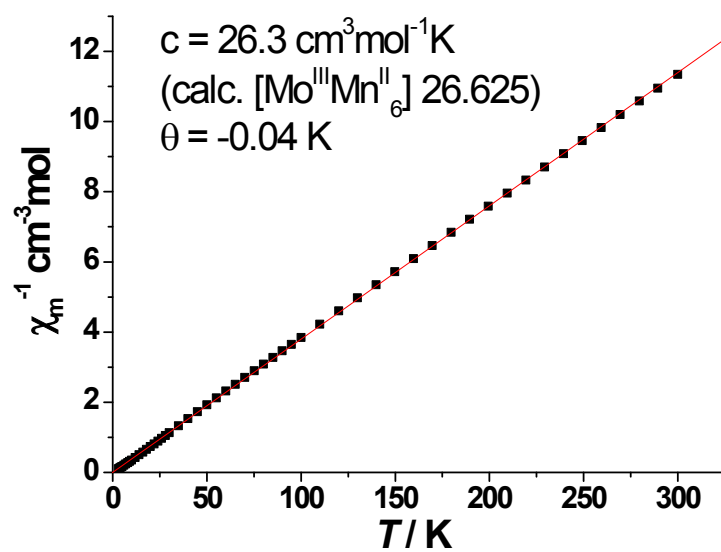
**Figure S8.** The  $\chi_M^{-1}$  versus  $T$  plot for **2**.



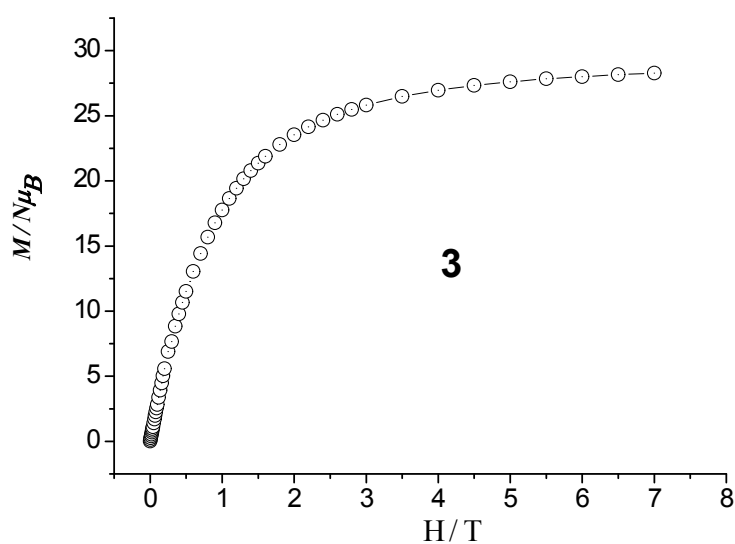
**Figure S9.** Magnetization as a function of the applied magnetic field for **2** ( $T = 2.0$  K).



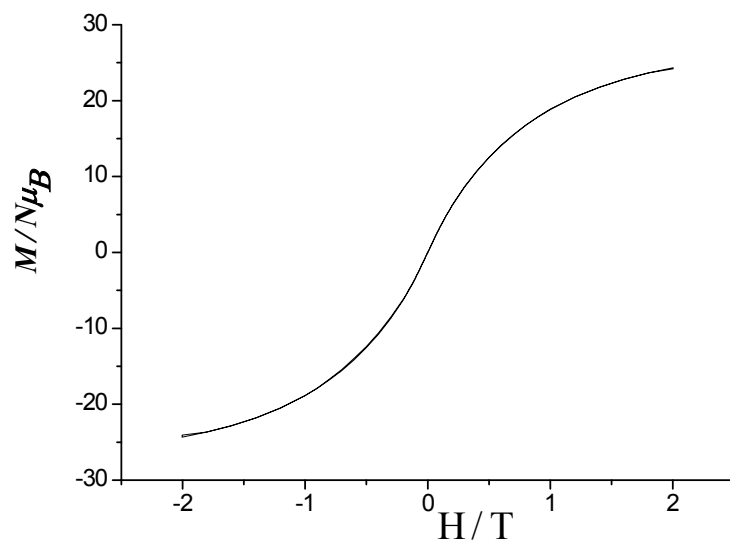
**Figure S10.** Hysteresis loop at 1.8 K for **2**.



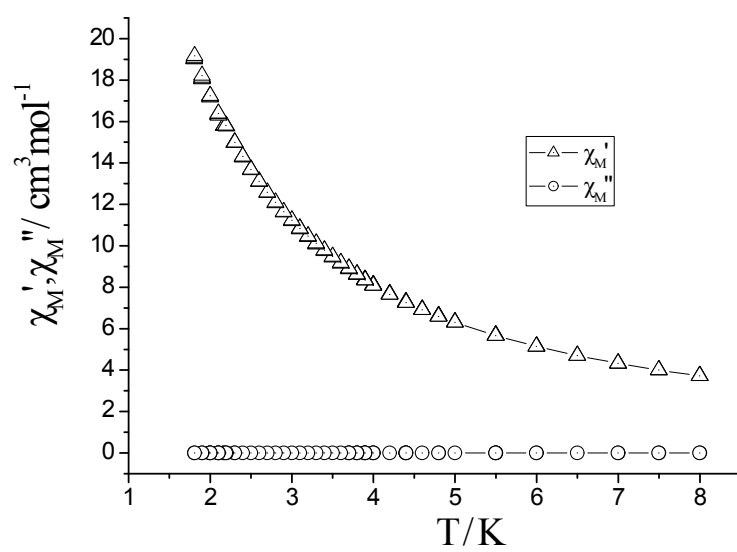
*Figure S11.* The  $\chi_M^{-1}$  versus  $T$  plot for **3**.



*Figure S12.* Magnetization as a function of the applied magnetic field for **3** ( $T = 2.0 \text{ K}$ ).



**Figure S13.** Hysteresis loop at 1.8 K for complex **3**.



**Figure S14.** The temperature dependence of the *ac* magnetic susceptibility for **3**.