SUPPLEMENTARY MATERIAL

Carboxylate-Bridged Dinuclear Dy$_2$ Single Molecule Magnets (SMMs): Synthesis, Structure, and Magnetic Studies

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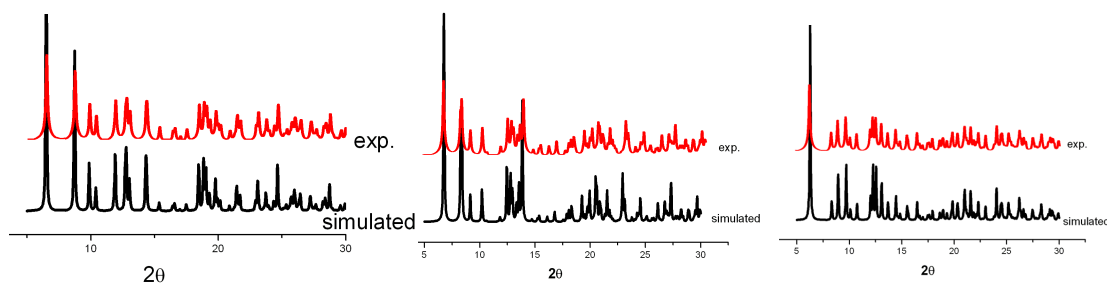
Figure S1. The experimental XRD pattern of bulk samples/red and the calculated XRD pattern of single crystal X-ray diffraction data/black for **1-3**, respectively.
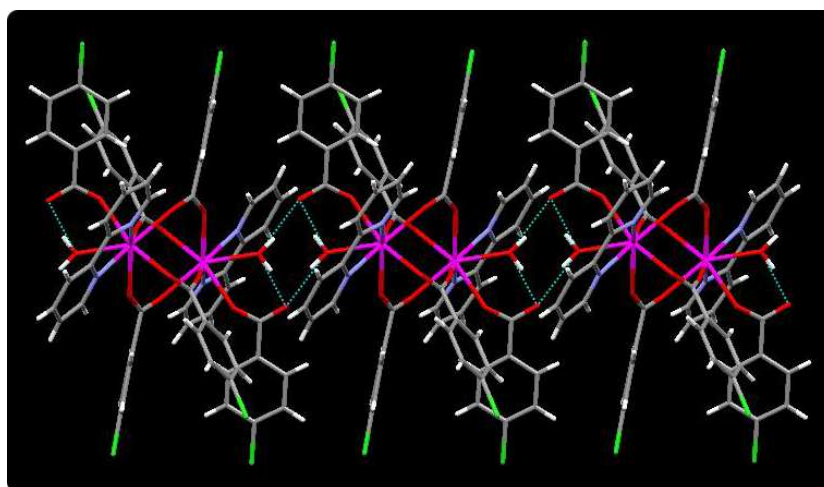

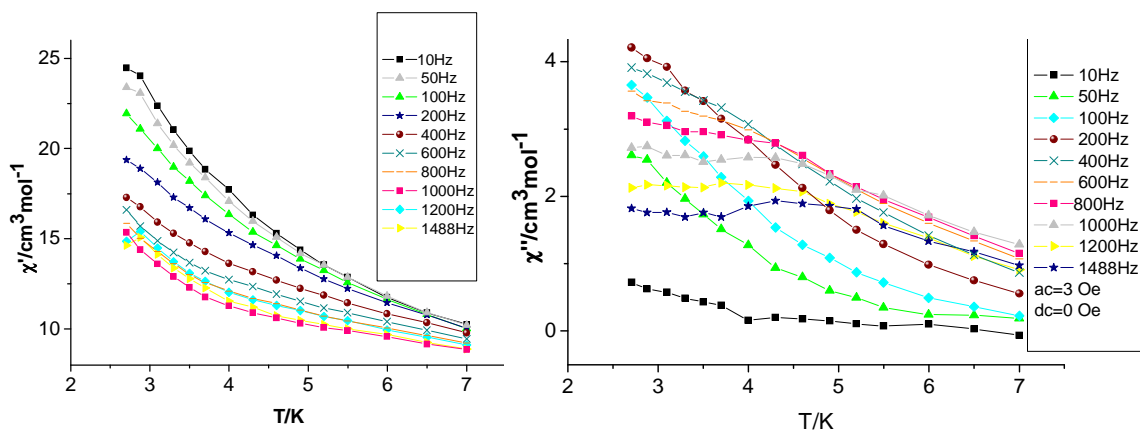**Figure S2.** View of the 1D supramolecular chain of **3**.

Figure S3. The χ' and χ'' versus T plots (dc/0 Oe, ac/3 Oe) of **1** at various frequencies.
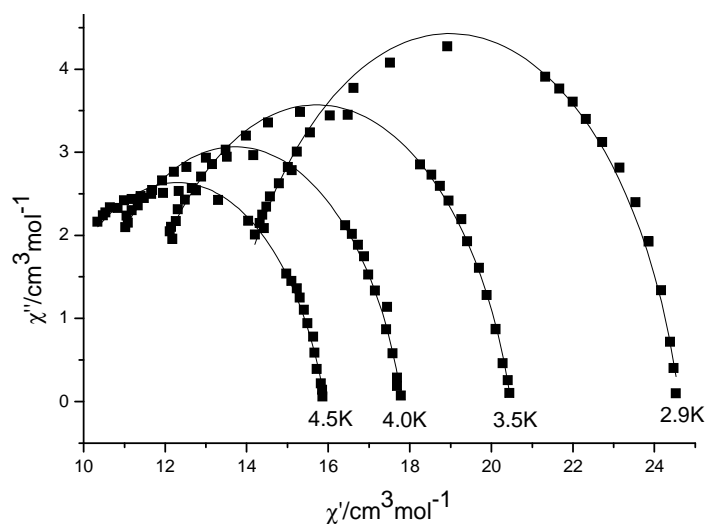

Figure S4. The Cole-Cole plot of **1** at dc=0 Oe, ac=3 Oe and the solid line is a least-squares fitting of the data to the generalized Debye model.
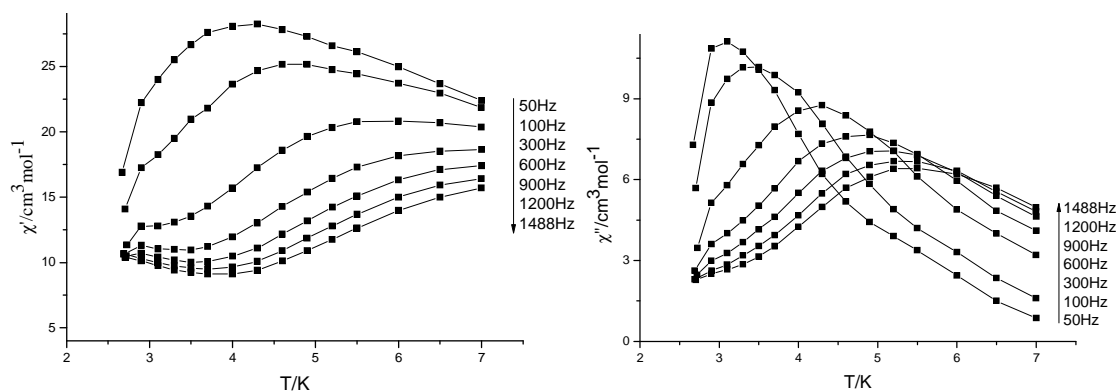

Figure S5. The temperature dependent ac susceptibility data under dc=1000Oe, ac=3Oe for **1**.
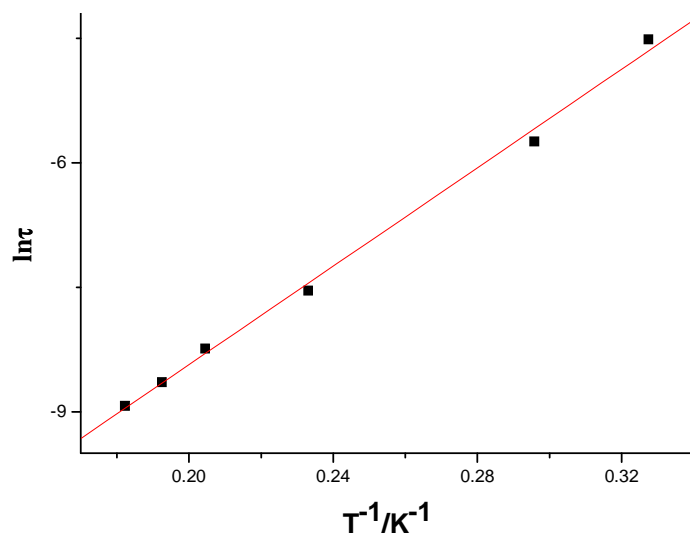
Figure S6. Based on the ac susceptibility data under dc=1000Oe, ac=3Oe, the ln(τ) vs. T^{-1} plot and the fitting by Arrhenius law marked in red.
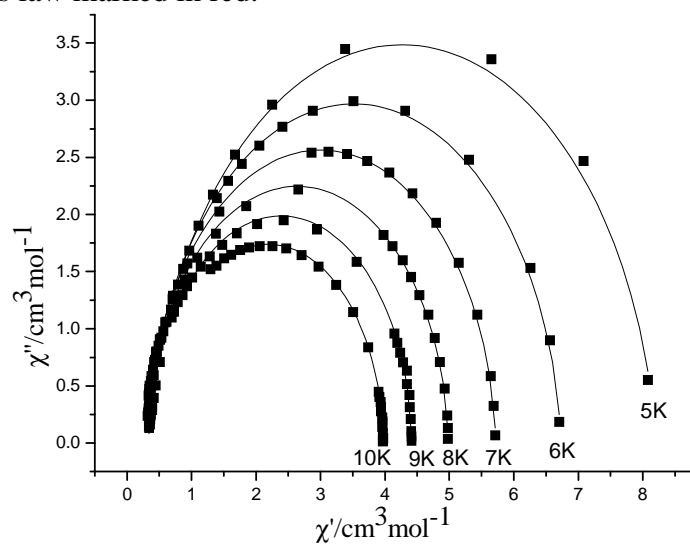

Figure S7. The Cole-Cole plot of **2** at dc=0 Oe, ac=3 Oe and the solid line is a least-squares fitting of the data to the generalized Debye model.

Figure S8. The χ' versus T and χ'' versus T plots (dc/0Oe, ac/3Oe) of **3**.

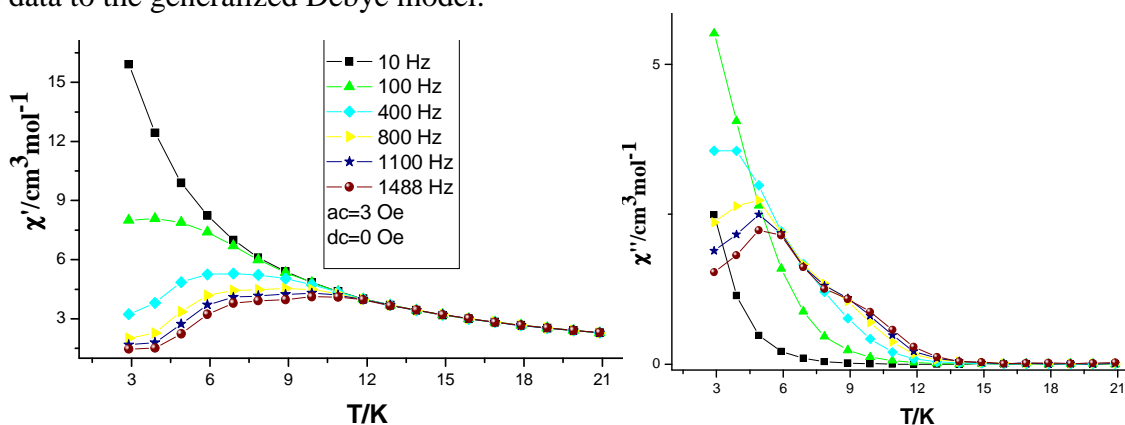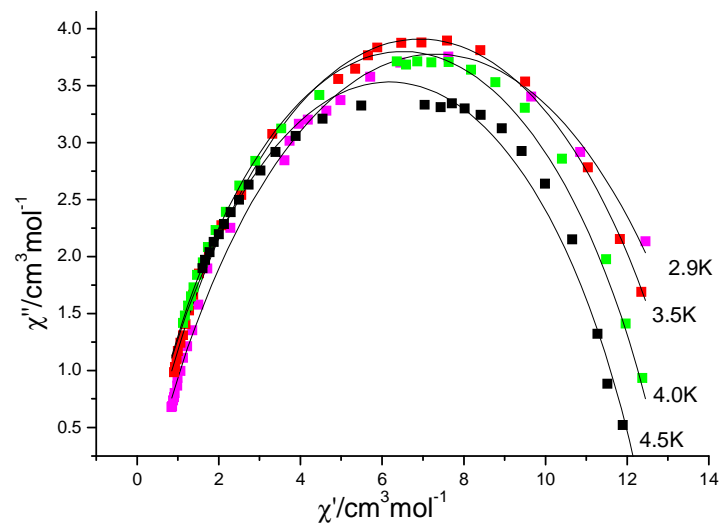**Figure S9.** The Cole-Cole plot of **3** at dc=2000 Oe, ac=3 Oe, and the solid line is a least-squares fitting of the data to the generalized Debye model.