Tetranuclear $[Cu\text{-}Ln]_2$ Single Molecule Magnets: Synthesis, Structural and Magnetic Studies.

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Supplementary Material

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Figure S1. Thermal dependence of $\chi_M T$ for **6** at 0.1 T.

Figure S2. Field dependence of the magnetization for **6** at 2K.

Figure S3. Frequency dependence of the out of phase susceptibilities against temperature in a 3 G ac magnetic field oscillating at different frequencies (50, 100, 250, 500 and 1000 Hz) for complex **3**.

Figure S4. Magnetization **(***M)* vs magnetic field (*H)* hysteresis loops for a single crystal of **3** at indicated temperatures and field sweep rates. *M* is normalized to its saturation value at 1.4 T.

Figure S5. Magnetization **(***M)* vs magnetic field (*H)* hysteresis loops for a single crystal of **6** at indicated temperatures and field sweep rates. *M* is normalized to its saturation value at 1.4 T.

Figure S6. Normalized magnetization M/M_S measured as a function of time at the indicated temperatures. The sample was a single crystal of **5**.

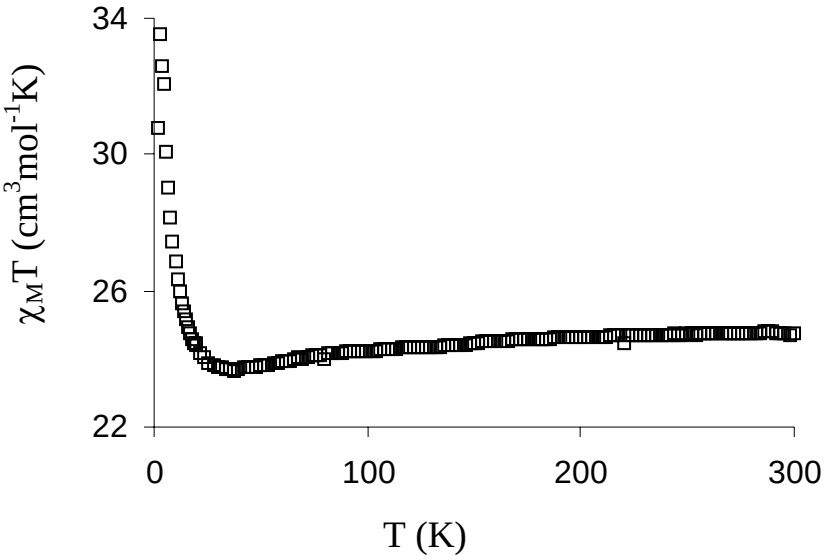

Figure S1

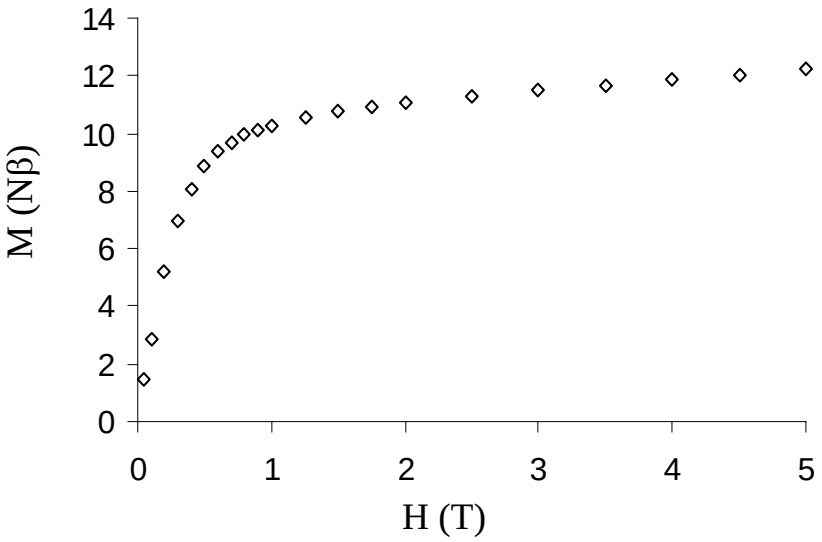

Figure S2

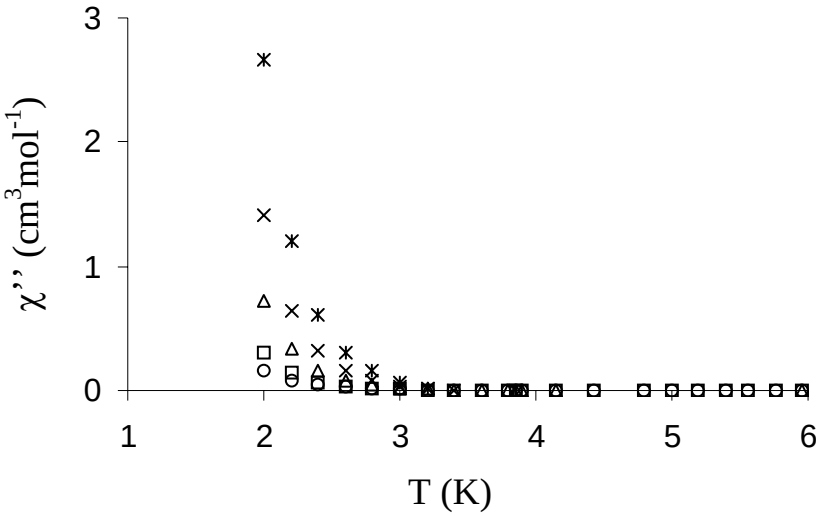

Figure S3.

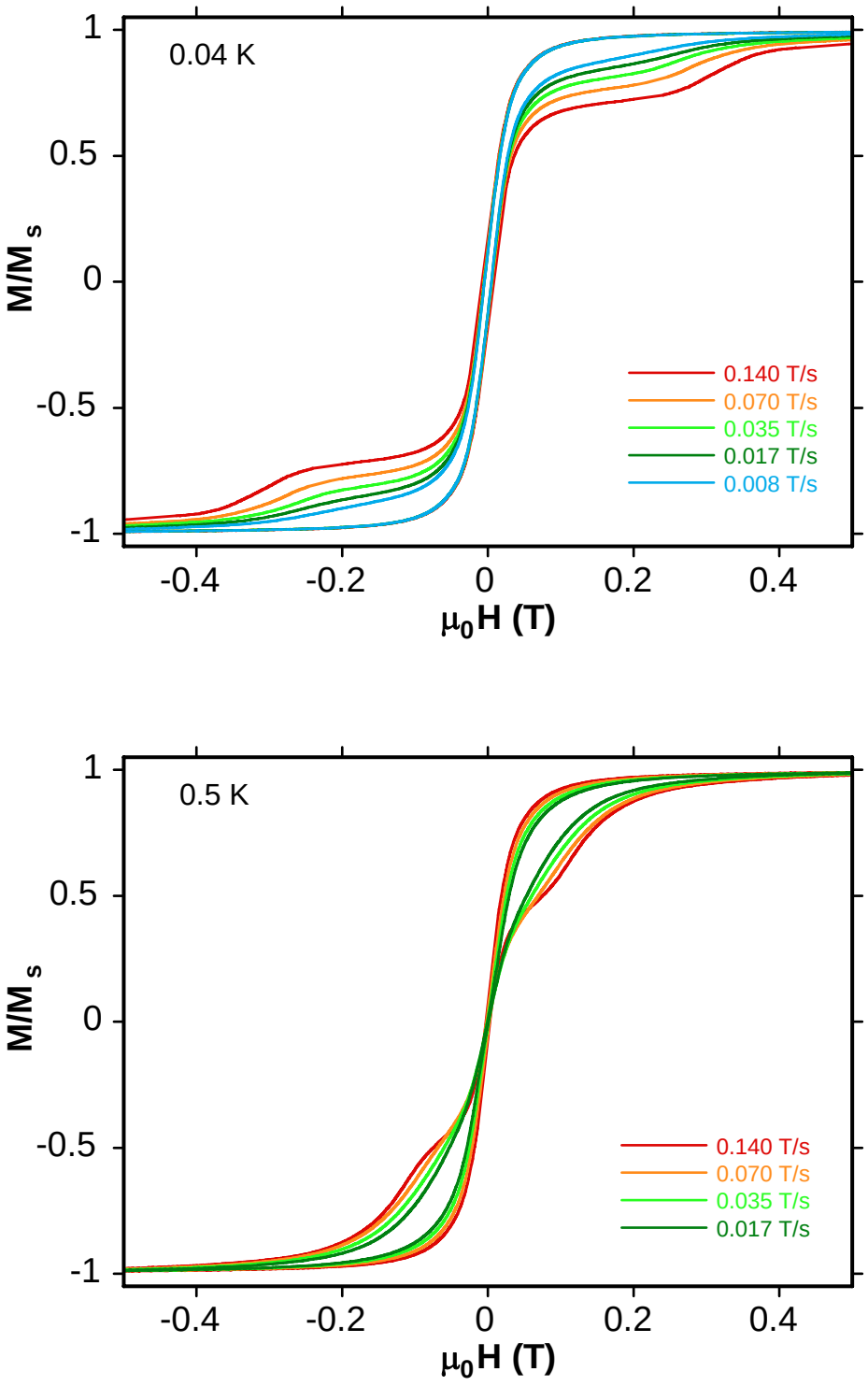
0.04 K
0.140 T/s
0.070 T/s
0.035 T/s
0.017 T/s
0.008 T/s
M/M s
μ0H (T)
0.5 K
0.140 T/s
0.070 T/s
0.035 T/s
0.017 T/s
M/M s
μ0H (T)

Figure S4.

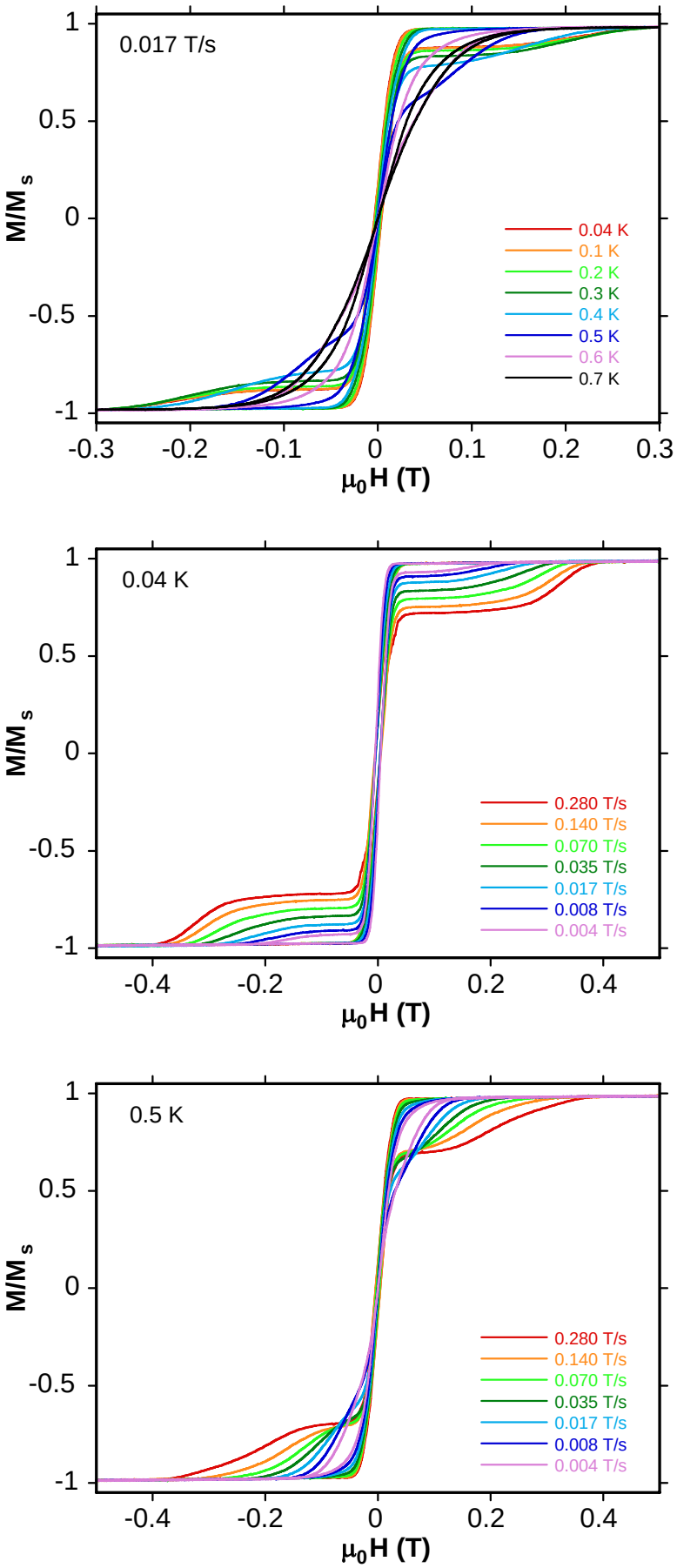
0.017 T/s
0.04 K
0.1 K
0.2 K
0.3 K
0.4 K
0.5 K
0.6 K
0.7 K
M/M s
μ0H (T)
0.04 K
0.280 T/s
0.140 T/s
0.070 T/s
0.035 T/s
0.017 T/s
0.008 T/s
0.004 T/s
M/M s
μ0H (T)
0.5 K
0.280 T/s
0.140 T/s
0.070 T/s
0.035 T/s
0.017 T/s
0.008 T/s
0.004 T/s
M/M s
μ0H (T)

Figure S5.

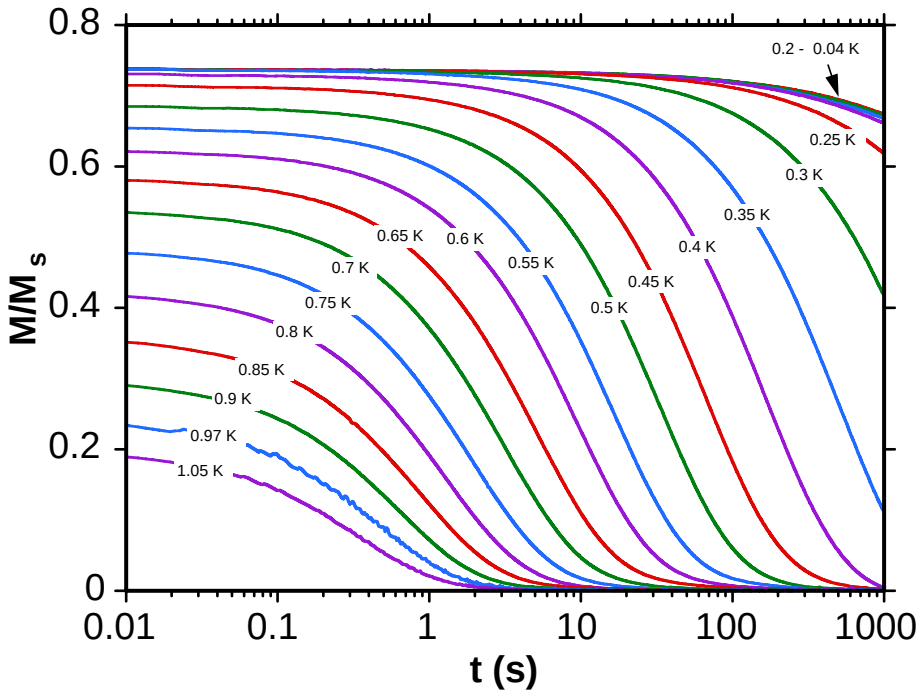
0.8
0.6
0.4
0.2
0
M/M s
0.01
0.1
1
10
100
1000
t (s)
0.2 - 0.04 K
0.25 K
0.3 K
0.35 K
0.4 K
0.45 K
0.5 K
0.55 K
0.6 K
0.65 K
0.7 K
0.75 K
0.8 K
0.85 K
0.9 K
0.97 K
1.05 K

Figure S6