Supporting Information

Slow magnetic relaxation and field-induced metamagnetism in nitronyl nitroxide-Dy(III) magnetic chains

Xiufeng Wang, Yungai Li, Peng Hu, Juanjuan Wang, Licun Li*

Department of Chemistry, Key Laboratory of Advanced Energy Materials Chemistry and Tianjin Key Laboratory of Metal and Molecule-based Material Chemistry, Nankai University, Tianjin 300071, China



Figure S1. Crystal structure of complex 1. All hydrogen and fluorine atoms are omitted for clarity.



Figure S2. Crystal structure of complex 2. All hydrogen and fluorine atoms are omitted for clarity.



Figure S3. Crystal structure of complex 3. All hydrogen and fluorine atoms are omitted for clarity.



Figure S4. Packing diagram of complex 1. All hydrogen atoms are not shown for the sake of clarity.



Figure S5. Packing diagram of complex 2. All hydrogen atoms are not shown for the sake of clarity.



Figure S6. Packing diagram of complex 3. All hydrogen atoms are not shown for the sake of clarity.



Figure S7. Powder X-ray diffraction profile of 1 together with a simulation from the single crystal data.



Figure S8. Powder X-ray diffraction profile of 3 together with a simulation from the single crystal data.



Figure S9. Powder X-ray diffraction profile of 4 together with a simulation from the single crystal data.



Figure S10 $ln(\chi T)$ vs. 1/T plot for 1.



Figure S11 $ln(\chi T)$ vs. 1/T plot for **2**.



Figure S12 $ln(\chi T)$ vs. 1/T plot for 3.



Figure S13. The M vs H plots of complexes 1 and 2 at 2K.



Figure S14. The hysteresis loop at 2.0 K for 4.



Figure S15. Plots of H vs time for 4 at 2.0K, which is from M versus H plot (Fig. S14).



Figure S16 The field-cooled(FC) and Zero-field-cooled(ZFC) susceptibility at 50 Oe for 4.



Figure S17. Temperature-dependent ac magnetic susceptibility of 3 with an oscillation of 3 Oe in zero dc field.