Supporting Information for

A Zigzag Dy^{III}_4 Cluster Exhibiting Single-Molecule Magnet, Ferroelectric and White Light-Emitting Properties

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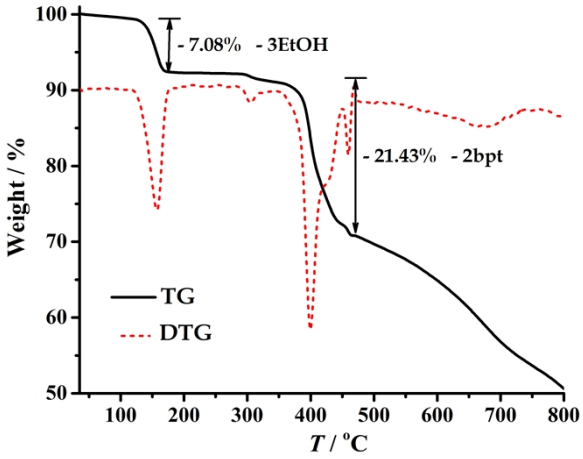

Figure S1. Thermogravimetry (TG) and derivative thermogravimetry (DTG) plots for **1** from 35°C to 800°C at 10°C min^{-1} under N_2 atmosphere.

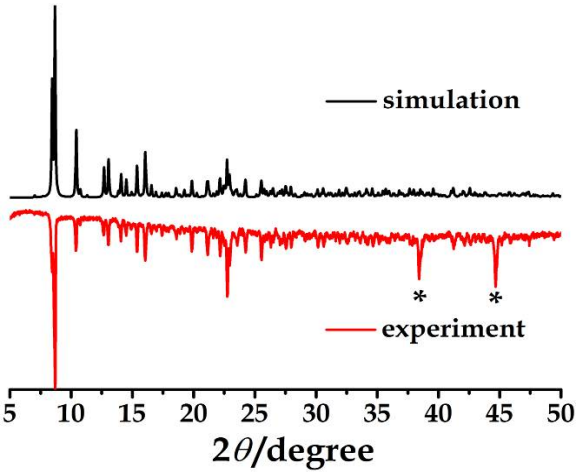

Figure S2. The experimental (red) and simulated (black) powder X-ray diffraction patterns for complex **1**. The peaks marked with * were due to the silicon carrier.

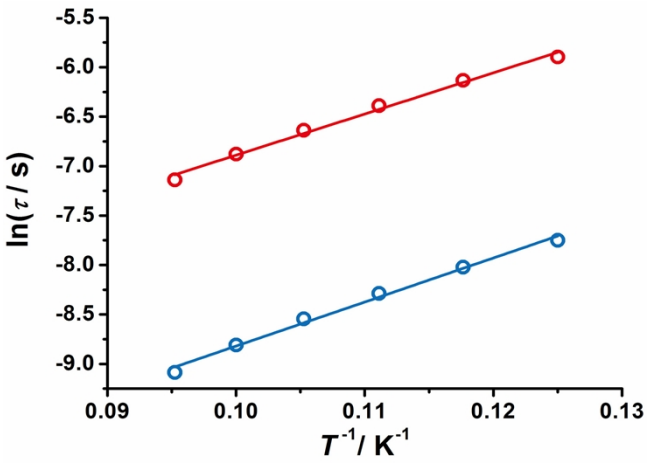

Figure S3. Relaxation time ln(τ) vs T^{-1} plot under zero dc field in the dual relaxation region. The solid lines represent the linear fit.

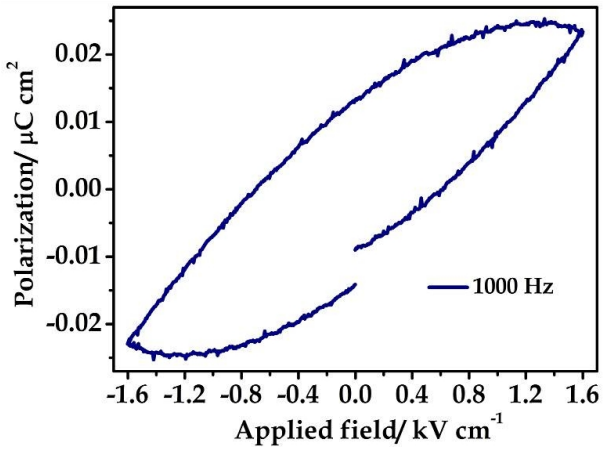

Figure S4. The Electric hysteresis loops of powder pellet sample at 1000 Hz for **1**.

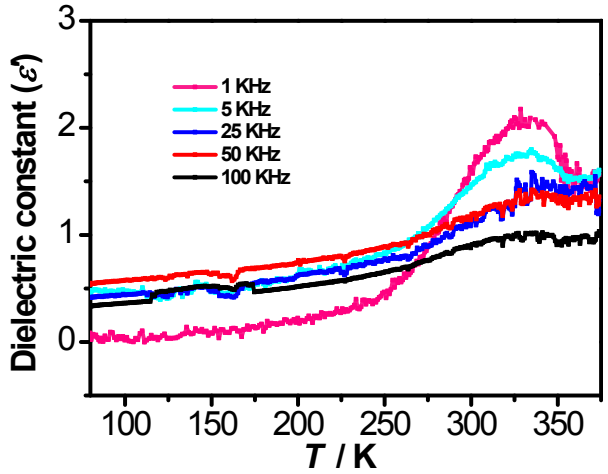

Figure S5. Real part of the complex dielectric constant of **1** as a function of temperature measured at different frequencies in heating cycle.

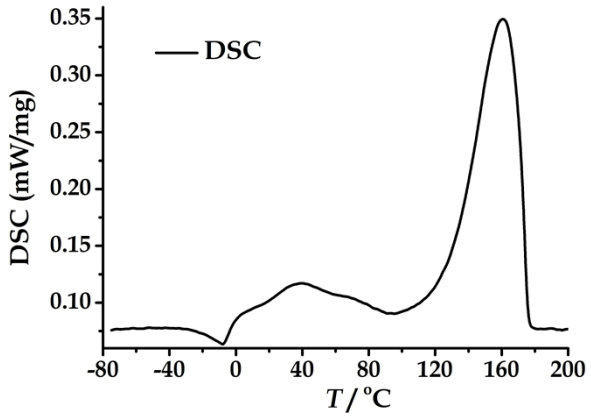

Figure S6. The DSC curves of complex **1**.

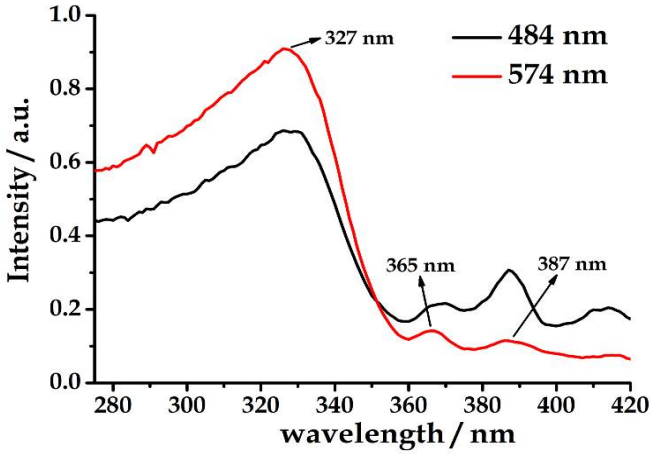

Figure S7. Excitation spectra of complex **1** measured at room temperature exposed to the air.

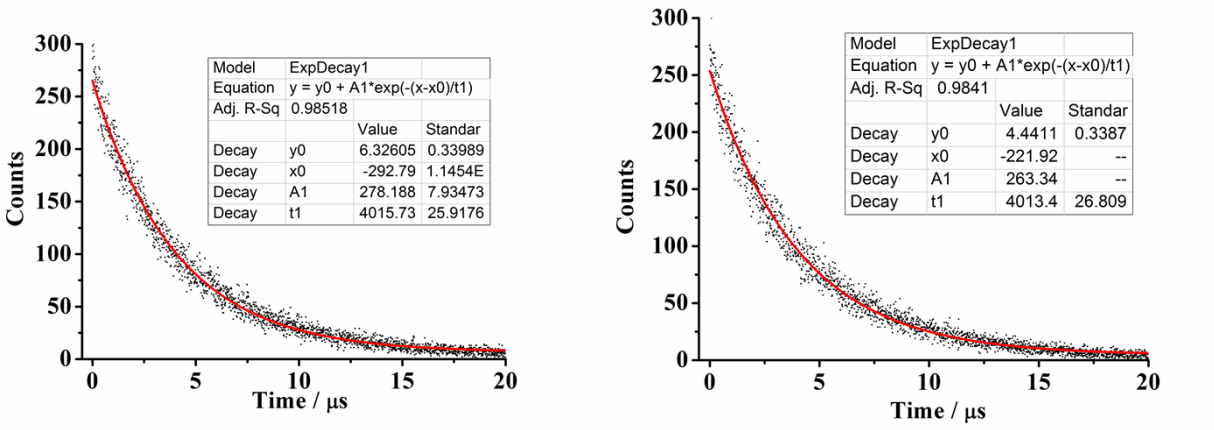

Figure S8. The decay lifetime curves of complex **1** at 484 (*left*) and 574 nm (*right*), respectively.

Table S1. Relaxation Fitting Parameters for the modified two-step Debye model in the dual relaxation region.[a]

T / K	χ_S	$\Delta\chi_1$	α_1	τ_1	$\Delta\chi_2$	α_2	τ_2
10.5	2.060	1.577	0.055	7.93(8)E-4	2.075	0.050	1.13(2)E-4
10	2.166	1.605	0.052	1.03(1)E-3	2.167	0.038	1.49(2)E-4
9.5	2.272	1.642	0.050	1.31(1)E-3	2.282	0.029	1.94(2)E-4
9	2.381	1.657	0.050	1.68(2)E-3	2.449	0.030	2.52(2)E-4
8.5	2.498	1.652	0.049	2.17(2)E-3	2.660	0.033	3.28(2)E-4
8	2.636	1.670	0.052	2.75(3)E-3	2.853	0.032	4.31(3)E-4

[a] Fitting function:

$$\chi_{ac} = \chi_S + \frac{\Delta\chi_1}{(1+i\omega\tau_1)^{1-\alpha_1}} + \frac{\Delta\chi_2}{(1+i\omega\tau_2)^{1-\alpha_2}}$$