Supporting Information for:

Phenoxido and Alkoxido-Bridged Dinuclear Dysprosium Complexes Showing Single-Molecule Magnets Behaviour

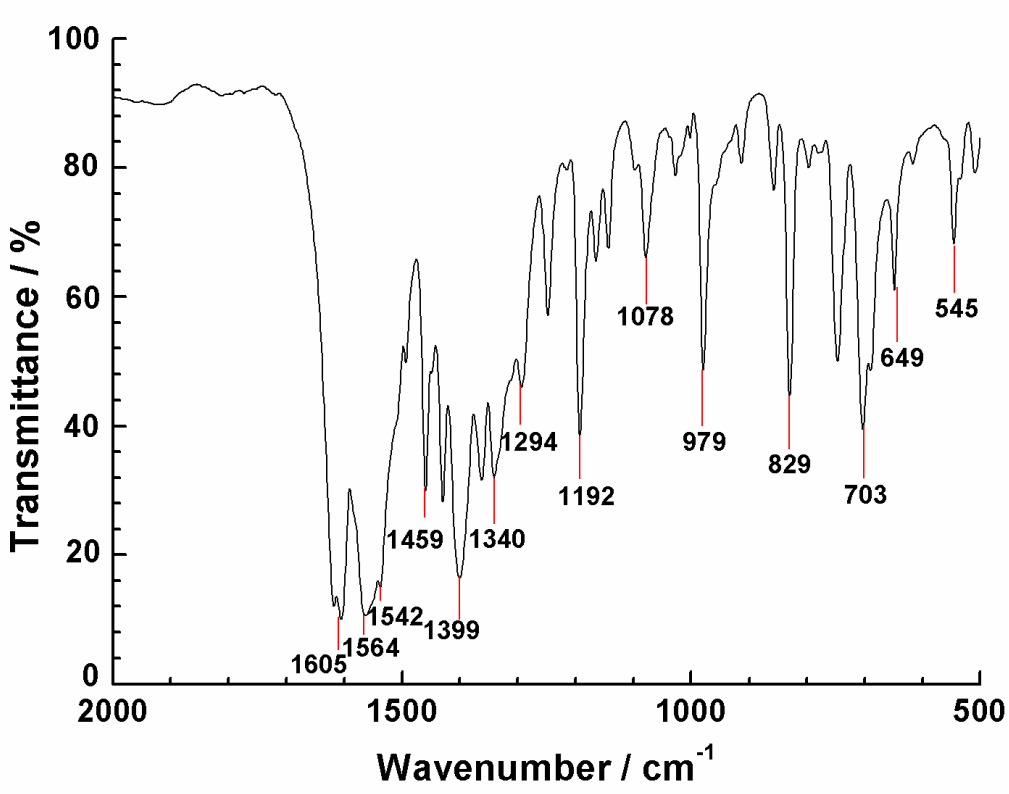

Fig. S1 Infrared spectrum of complex **1**.

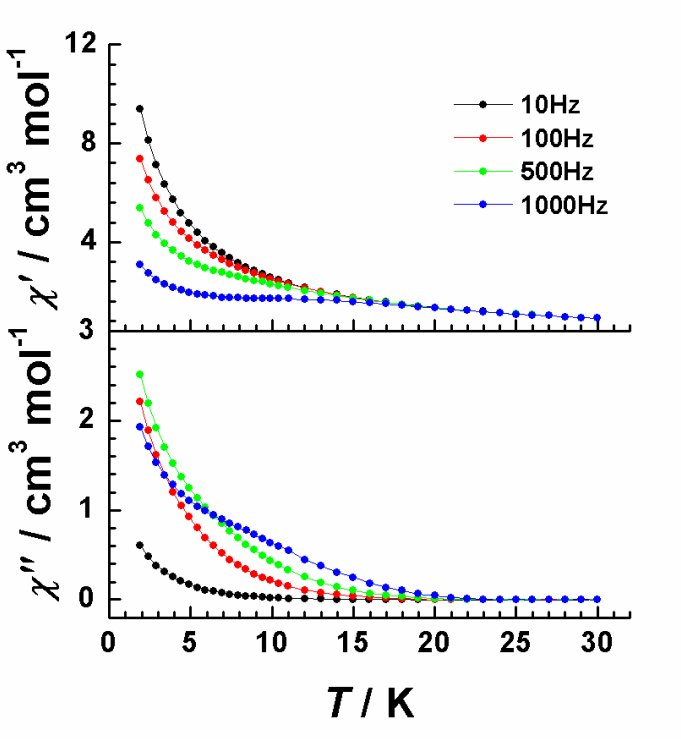

Fig. S2 Temperature dependence of the in phase (top) and out of phase (bottom) ac susceptibility of the complex **1** under zero dc field.

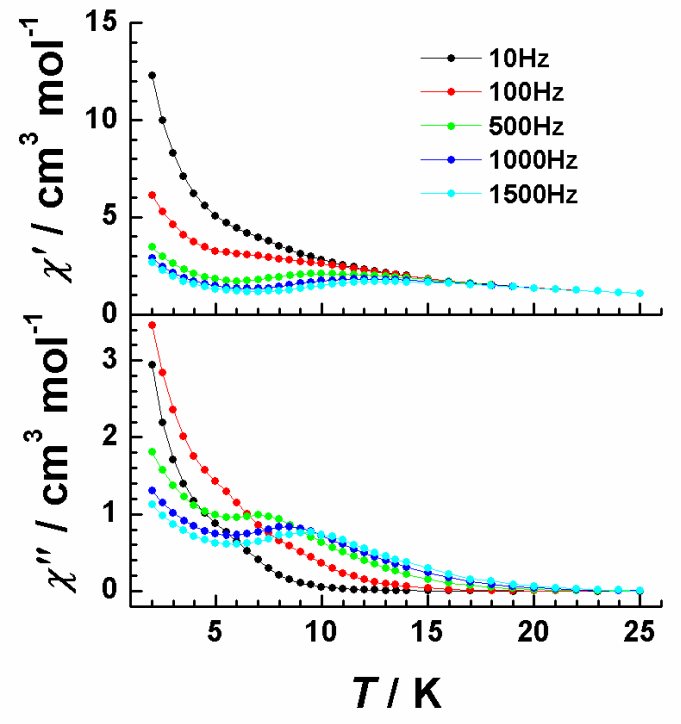

Fig. S3 Temperature dependence of the in phase (top) and out of phase (bottom) ac susceptibility of the complex **2** under zero dc field.

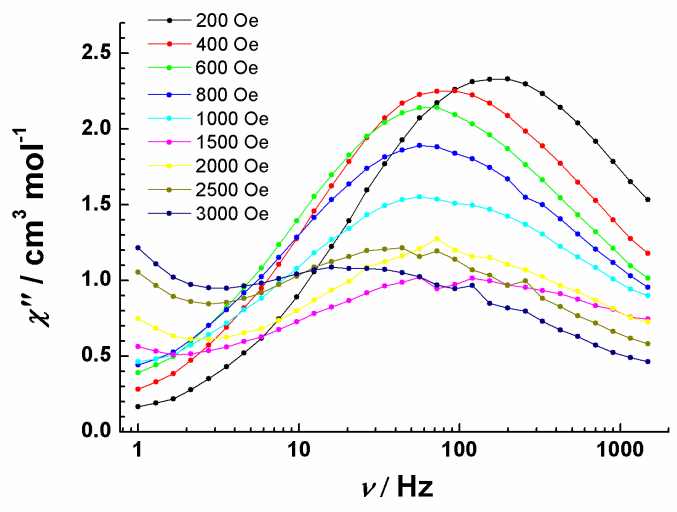

Fig. S4 the out-of-phase (bottom) ac susceptibility as a function of the dc applied field measured at 1.9 K for **1**.

Table S1 Selected bond lengths (Å) and angles (°) for complexes **1** and **2**

Complex **1**		Complex **2**	
Bond distances (Å)			
Dy1—O1	2.185(11)	Dy1—O1	2.3135(17)
Dy1—O2	2.376(8)	Dy1—O1′	2.3404(17)
Dy1—O3	2.360(6)	Dy1—O2	2.1598(17)
Dy1—O4	2.362(6)	Dy1—O3	2.486(2)
Dy1—O5	2.303(13)	Dy1—O4	2.427(2)
Dy1—O3′	2.339(7)	Dy1—O6	2.3659(19)
Dy1—N1	2.508(10)	Dy1—N3	2.462(2)
Dy1—N3	2.502(8)	Dy1—N1′	2.543(2)
Dy1—Dy1′	3.7112(10)	Dy1—Dy1′	3.9225(2)
Dy1—O7′	2.383(18)	Dy1′—O1	2.3404(17)
N1—N2	1.407(15)	N2—N3	1.412(3)
N1—C11	1.305(19)	N3—C7	1.295(3)
C12—O2	1.245(15)	C6—O1	1.320(3)
N3—N4	1.388(10)		
N3—C29	1.270(12)		
C30—O4	1.261(10)		
Bond angles (°)			
O1—Dy1—N1	68.9(3)	O1—Dy1—O1′	65.12(7)
O2—Dy1—N1	63.7(4)	O1—Dy1—N3	65.21(6)
O3—Dy1—N3	69.3(2)	O2—Dy1—N3	73.14(7)
O4—Dy1—N3	64.0(2)	O1′—Dy1—N1′	65.14(6)
O3′—Dy1—O3	69.9(3)	Dy1—O1—Dy1′	114.88(7)
Dy1—O3—Dy1′	104.3(3)		

Symmetry codes: (′ in complex **1**) -*x*, *y*, 1/2-*z* and (′ in complex **2**) –*x*, 1-*y*, 1-*z*.