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Supplementary Material

Dinuclear Lanthanide–Carboxylate Compounds: Field-Induced Slow Relaxation of Magnetization for Dysprosium(III) Analogue

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Scheme S1. Coordination modes of the organic ligand in ${\bf 1}$



 $\label{eq:sigma} \mbox{Figure S1}. \mbox{ The experimental powder XRD patterns for Dy(1), Gd(2) and Er(3) and Simulated powder XRD patterns for Dy(1) and Gd(2) and Er(3) and Er(3) and Simulated powder XRD patterns for Dy(1) and Gd(2) and Er(3) and Er(3)$



Fig. S2 Packing arrangements along the *a*, *b*, and *c*-axes for **1**.

b



Fig. S3. Field dependence of the magnetization of 1 measured at 1.9 K.



Fig. S4. Field dependence of the magnetization of **3** measured at 2 K.



Fig. S5. Temperature dependence of the in-phase (top) and out-of phase (bottom) ac susceptibility signals under zero dc field

for **1**.



Fig. S6. Temperature dependence of the in-phase (top) and out-of phase (bottom) ac susceptibility signals under zero dc field for **3**.



Fig. S7. Temperature dependence of the in-phase and out-of phase ac susceptibility signals under 2 kOe dc field for 3.