Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Supporting Information

The effect of magnetic coupling on magneto-caloric behaviour in two 3D Gd(III)-glycolate coordination polymers

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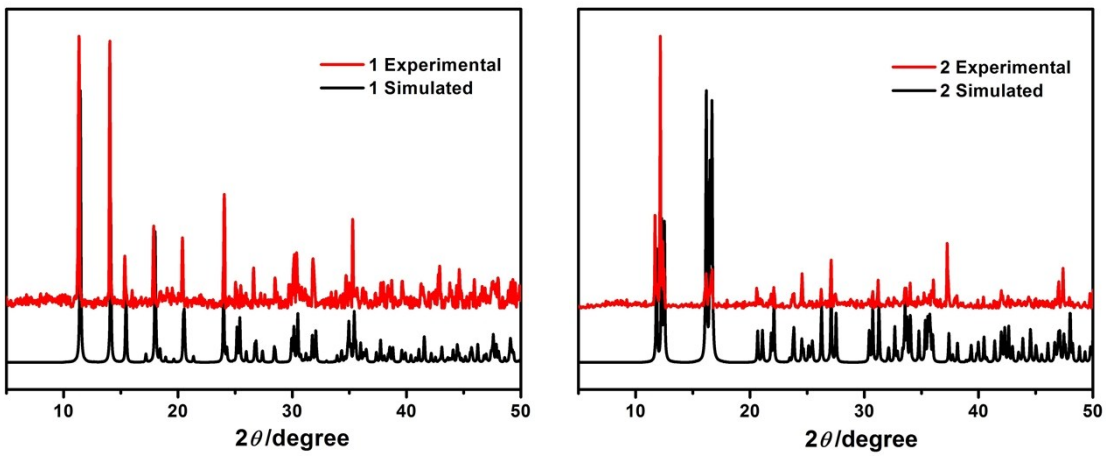

Fig. S1 Simulated and experimental X-ray powder diffraction patterns for **1** (left) and **2** (right).

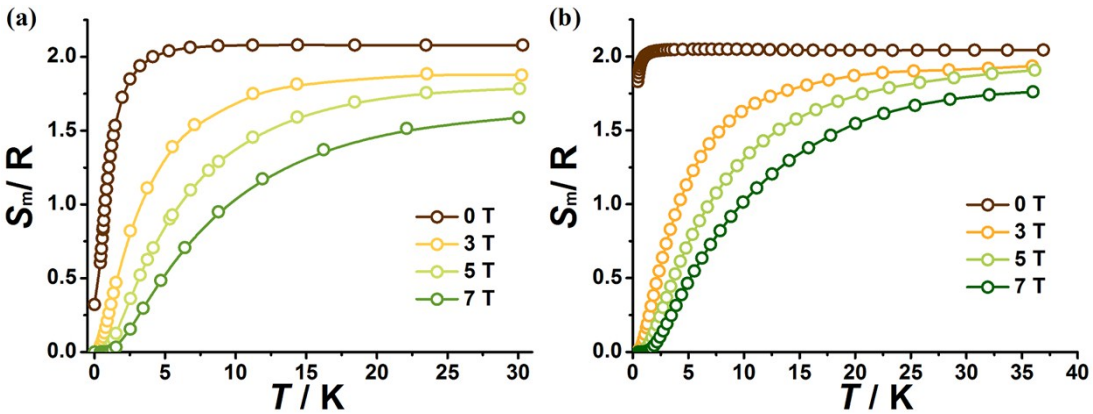

Fig. S2 Temperature-dependent S_m/R in selected applied fields for **1** (a) and **2** (b). Lines are guides to the eyes.

Table S1. Crystallographic Data and Structural Refinements for **1** and **2**.

Complex	**1**	**2**
Formula	$C_4H_9GdO_8$	$C_6H_9GdO_9$
M_r	342.36	382.38
Crystal system	monoclinic	monoclinic
Space group	$P2_1/c$	$P2_1$
***a*[Å]**	6.2789(3)	8.1242(11)
***b*[Å]**	9.0295(6)	8.0394(13)
***c*[Å]**	14.8336(9)	8.4324(12)
***α*[°]**	90	90
***β*[°]**	92.585(2)	117.490(4)
***γ*[°]**	90	90
***V*[Å^3]**	840.14(9)	488.57(13)
Z	4	2
ρ_{calcd}**[mg mm^{-3}]**	2.707	2.599
***T*[K]**	150	150
Goof on F^2	1.035	1.099
R_1[I>2σ(I)][a]	0.0292	0.0423
***w*R_2[all data][b]**	0.0729	0.1001

[a] $R_1 = \sum||F_o|- |F_c||/\sum|F_o|$, [b] $wR_2 = [\sum w(F_o^2 - F_c^2)^2/w(F_o^2)^2]^{1/2}$.