Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Supporting Information

Field-Induced Dynamic Magnetic Behaviour of a Canted Weak Ferromagnetic Chain Material

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Table S1. Bond valence sum calculations of Mn oxidation states in the crystal structure of **1**.

Compound **1**			
	+2	**+3**	**+4**
Mn1	3.499(18)	3.261(16)	3.126(16)
Mn2	3.478(20)	3.240(19)	3.093(18)
Mn3	3.357(19)	3.125(18)	2.992(18)

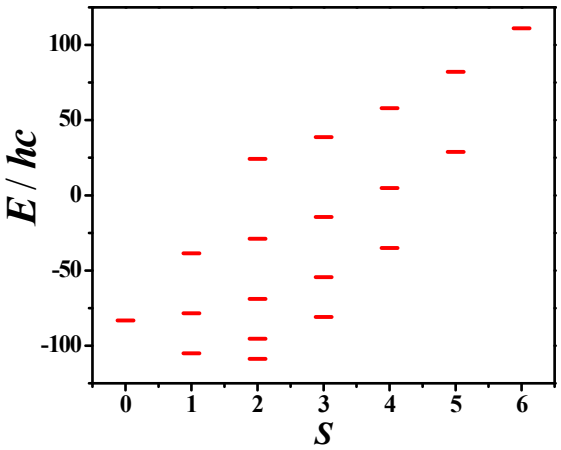

Figure S1. Reconstructed zero-field energy levels for **1** using the isotropic exchange parameters J_1 = -2.41 cm^{-1}, J_2 = -9.06 cm^{-1}.

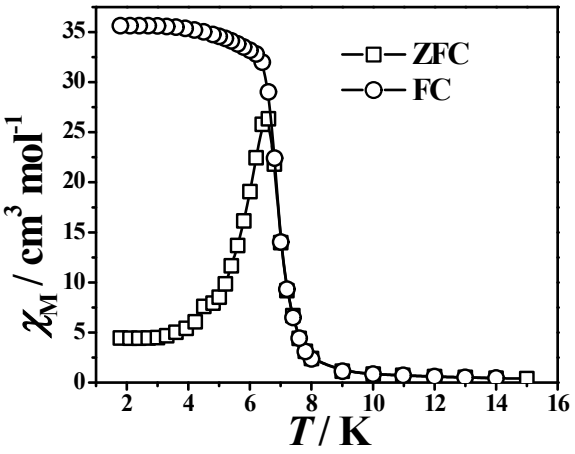

Figure S2. The temperature dependence of the zero-field-cooled (ZFC) and field-cooled (FC) susceptibility measured on a powder sample of **1** in an applied field of 10 Oe.

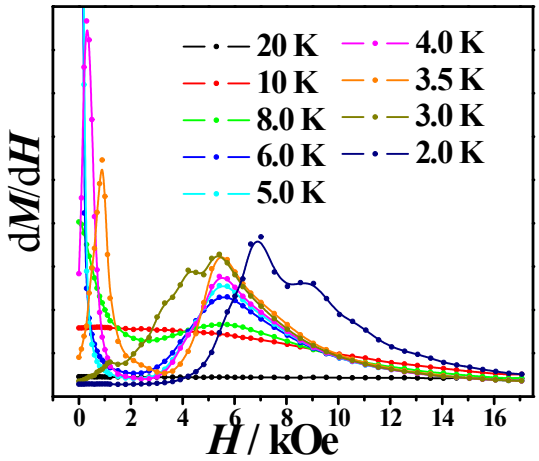

Figure S3. The derivatives of *M* against *H* at the indicated temperatures.

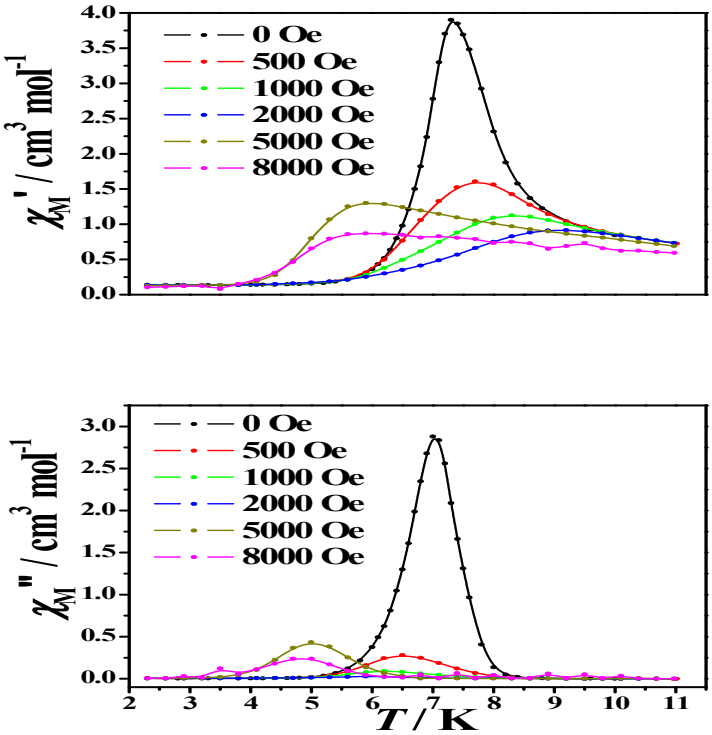

Figure S4. Temperature dependence of in-phase (up) and out-of-phase (down) of the ac susceptibility at the indicated dc fields.

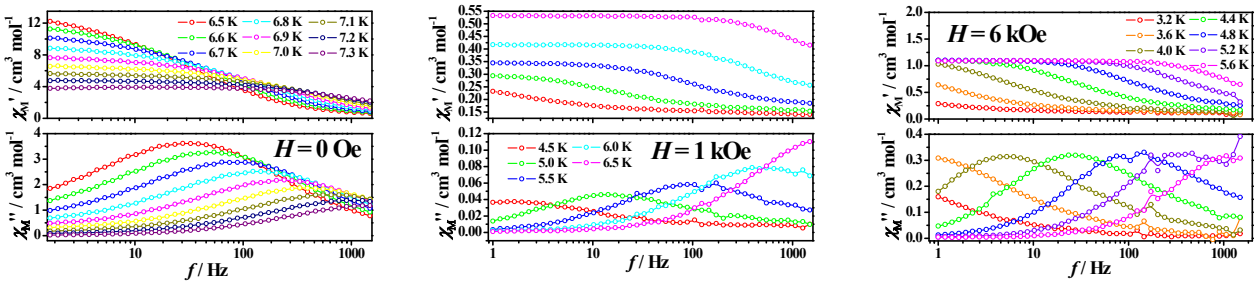

Figure S5. Frequency dependence of the ac susceptibility at 0 Oe (left), 1 kOe (middle) and 6 kOe (right) dc fields.

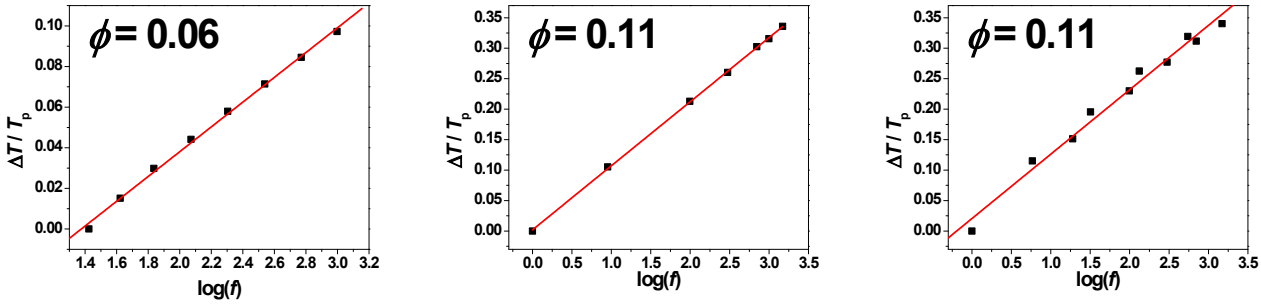

Figure S6. The log(f) vs. $\Delta T_p/T_p$ plots for **1** at 0 Oe (left), 1 kOe (middle) and 6 kOe (right) dc fields.

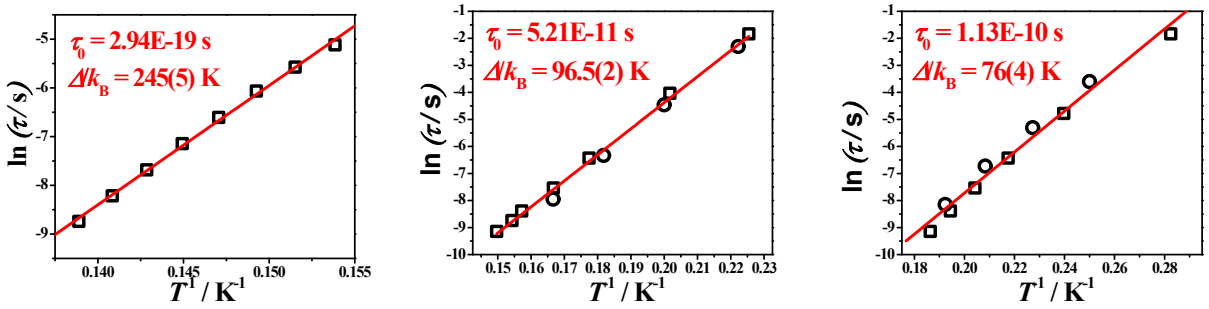

Figure S7. The ln(τ) versus T^{-1} plots obtained from $\chi_M''(T)$ (○) and $\chi_M''(\nu)$ (□); The solid lines correspond to the Arrhenius law for **1** at 0 Oe (left), 1 kOe (middle) and 6 kOe (right) dc fields.

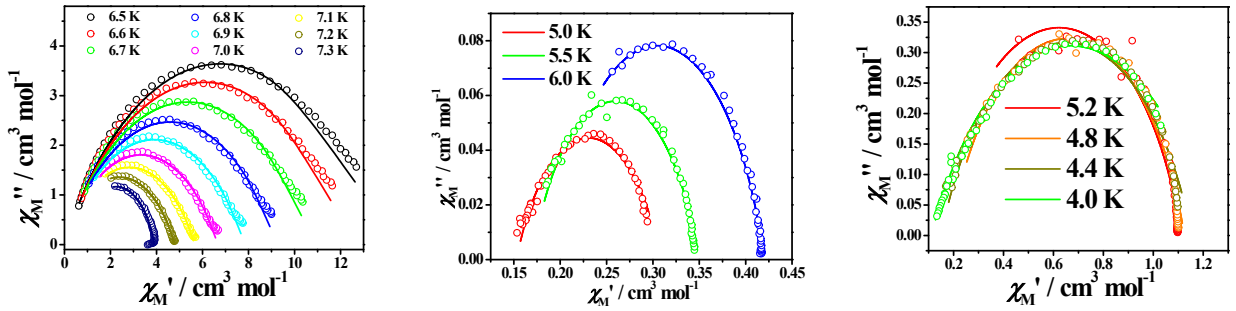

Figure S8. Cole-Cole plots for **1** at 0 Oe (left), 1 kOe (middle) and 6 kOe (right) dc fields.