Supplementary Material: Magnetic-Field-Induced Sign Changes of Thermal Expansion in $DyCrO_4$

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Table S1. Refined structural parameters of the zircon- and scheelite-type $DyCrO_4$ at room temperature.

Composition	Space group	Atom	Site	g	*x*	*y*	*z*	$100\times U_{iso}$(Å^2)
z-$DyCrO_4$[a]	$I4_1/amd$	Dy	4a	1	0	0.75	0.125	2.5
		Cr	4b	1	0	0.25	0.375	2.5
		O	16h	1	0	0.4299	0.2021	2.5
s-$DyCrO_4$[b]	$I4_1/a$	Dy	4b	1	0	0.25	0.625	2.5
		Cr	4a	1	0	0.25	0.125	2.5
		O	16f	1	0.2534(6)	0.1058(4)	0.0475(1)	2.5

[a]Space group: $I4_1/amd$, $a = b = 7.13742(7)$ Å, $c = 6.26562(7)$ Å, $V = 319.188(9)$ Å^3, $\alpha = \beta = \gamma = 90°$. *R*-factor: $R_{wp} = 6.65\%$, $R_p = 4.62\%$.

[b]Space group: $I4_1/a$, $a = b = 5.015(5)$ Å, $c = 11.310(9)$ Å, $V = 284.531(9)$ Å^3, $\alpha = \beta = \gamma = 90°$. *R*-factor: $R_{wp} = 2.3\%$, $R_p = 1.73\%$.