

Supplemental Table OM10. Data used to create the graphs of Figure 5.

	Formula	<i>T/X</i> ratio	{<i>T1-O3-T2</i>}	σ^2_{T1}	σ^2_{T2}
1	$\text{Ba}_2\text{FeSi}_2\text{O}_7$	0.627	125.6	143.5	39.4
2	$\text{Ba}_2\text{CuSi}_2\text{O}_7$	0.620	128.3	199.7	28.8
3	$\text{Ba}_2\text{MgSi}_2\text{O}_7$	0.625	124.6	84.1	28.3
4	$\text{Ba}_2\text{CoSi}_2\text{O}_7$	0.631	123.8	79.8	35.9
5	$\text{Ba}_2\text{MnSi}_2\text{O}_7$	0.634	124.8	77.9	21.9
6	$\text{Ba}_2\text{CuGe}_2\text{O}_7$	0.647	124.4	110.9	48.0
7	$\text{Ba}_2\text{FeGu}_2\text{O}_7$	0.650	121.2	50.6	72.0
8	$\text{Ca}_2\text{SiB}_2\text{O}_7$	0.637	120.7	8.0	25.5
9	$\text{Sr}_2\text{Al}_2\text{SiO}_7$	0.641	121.6	22.9	36.1
10	$\text{Ca}_2\text{BeSi}_2\text{O}_7$	0.648	120.8	12.9	41.8
11	$\text{Sr}_2\text{MgSi}_2\text{O}_7$	0.648	121.8	34.4	38.9
12	$\text{NaCaAlSi}_2\text{O}_7$	0.649	120.9	16.5	36.7
13	$\text{Ca}_2\text{Al}_2\text{SiO}_7$	0.665	118.7	4.3	48.8
14	$\text{Ca}_2\text{CoSi}_2\text{O}_7$	0.665	118.8	9.0	53.6
15	$\text{Ca}_2\text{MgSi}_2\text{O}_7$	0.667	118.9	5.6	47.2
16	$\text{Ca}_2\text{ZnSi}_2\text{O}_7$	0.670	118.7	4.7	43.4
17	$\text{Y}_2\text{SiBe}_2\text{O}_7$	0.685	113.7	1.6	103.3
18	$\text{Ca}_2\text{ZnGe}_2\text{O}_7$	0.689	113.4	0.0	117.8