

Erratum

Cation ordering and structural variations with temperature in MgAl₂O₄ spinel: An X-ray single-crystal study by Giovanni B. Andreozzi, Francesco Princivalle, Henrik Skogby, and Antonio Della Giusta (v. 85, no. 9, p. 1164–1171, 2000).

The sentence beginning on the bottom of page 1165 and continuing to page 1166 should read:

“The best values of the statistical descriptors *R1*, *wR2*, and GooF in all $\sin \theta/\lambda$ shells, as well as a total m.a.n. very close to that expected from stoichiometry, were obtained for O^{-1.6} and neutral curves for Mg and Al.”

Table 3 had five values missing and is redone below. Figure 3 was missing open squares both in the image and the key, and it is redone below as well.

TABLE 3. Inversion degrees and calculated and observed structural parameters of heat-treated MgAl₂O₄

T °C	Time	x		a (Å)	u	T-O (Å)	M-O (Å)	T m.a.n.	M m.a.n.	F(x)
SP3	–	0.229(6)	cal.	8.0844	0.26223	1.9216	1.9273	12.2	12.88	1.0
			obs.	8.0844(1)	0.26223(5)	1.9216(7)	1.9273(4)	12.3(1)	12.87(6)	
800 D	1 d	0.231(8)	cal.	8.0845	0.26222	1.9214	1.9274	12.2	12.88	2.2
			obs.	8.0845(1)	0.26222(6)	1.9215(8)	1.9274(4)	12.3(1)	12.85(7)	
850 D	1 d	0.24(1)	cal.	8.0841	0.26212	1.9199	1.9280	12.2	12.88	6.9
			obs.	8.0841(1)	0.26212(4)	1.9200(6)	1.9280(3)	12.38(9)	12.82(5)	
900 D	1 d	0.25(1)	cal.	8.0840	0.26193	1.9172	1.9294	12.3	12.87	5.2
			obs.	8.0840(1)	0.26193(6)	1.9173(8)	1.9294(4)	12.4(1)	12.82(6)	
950 D	1 d	0.262(9)	cal.	8.0838	0.26183	1.9158	1.9301	12.3	12.87	4.0
			obs.	8.0838(1)	0.26183(4)	1.9158(6)	1.9301(3)	12.36(8)	12.82(5)	
1000 D	1 d	0.27(1)	cal.	8.0835	0.26171	1.9141	1.9309	12.3	12.86	5.2
			obs.	8.0835(1)	0.26171(4)	1.9141(6)	1.9309(3)	12.4(1)	12.81(6)	
1100 D	1 d	0.29(1)	cal.	8.0829	0.26152	1.9112	1.9321	12.3	12.85	22.7
			obs.	8.0829(1)	0.26152(5)	1.9113(7)	1.9321(4)	12.50(9)	12.75(5)	
950 O	3 d	0.266(9)	cal.	8.0837	0.26183	1.9158	1.9301	12.3	12.86	12.8
			obs.	8.0837(1)	0.26183(4)	1.9158(6)	1.9300(3)	12.4(1)	12.80(4)	
800 O	7 d	0.23(1)	cal.	8.0846	0.26223	1.9216	1.9274	12.3	12.88	10.1
			obs.	8.0846(1)	0.26223(4)	1.9216(6)	1.9274(3)	12.40(9)	12.79(6)	
700 O	90 d	0.208(5)	cal.	8.0851	0.26251	1.9257	1.9255	12.2	12.89	1.0
			obs.	8.0851(1)	0.26251(4)	1.9257(6)	1.9255(3)	12.25(9)	12.89(5)	
600 O	45 d	0.18(1)	cal.	8.0856	0.26286	1.9307	1.9231	12.2	12.90	5.3
			obs.	8.0856(1)	0.26286(4)	1.9307(6)	1.9230(3)	12.30(7)	12.88(4)	

Notes: Estimated standard deviations in brackets. SP3 = untreated crystal; D = disordering; O = ordering; F(x) = sum of square residuals, (Eq. 1).

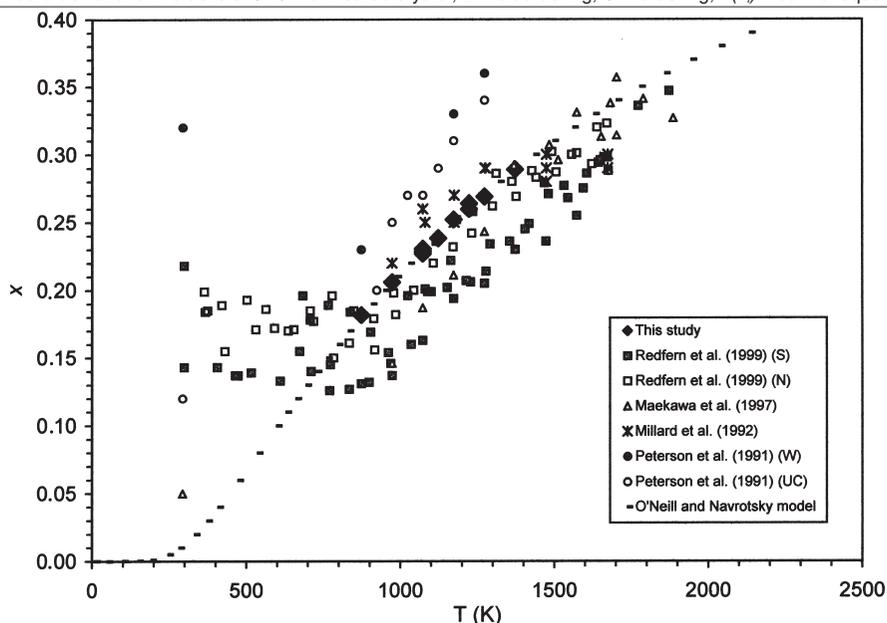


FIGURE 3, CORRECTED. Variation in inversion degree with temperature. Size of the symbol used for our inversion data is comparable with the estimated standard deviation. Gray and open squares used for data from Redfern et al. (1999) refer to stoichiometric and non-stoichiometric samples respectively. Gray and open circles used for data from Peterson et al. (1991) refer to B. Wood and the Union Carbide samples, respectively.