

Table S2: Selected Bond Distances (Å) and Bond Valences (v.u.) for alkaline earth metals in $\text{Sr}_3\text{B}_6\text{O}_{11}\text{F}_2$ and $\text{Ba}_3\text{B}_6\text{O}_{11}\text{F}_2$

	$\text{Sr}_3\text{B}_6\text{O}_{11}\text{F}_2$		$\text{Ba}_3\text{B}_6\text{O}_{11}\text{F}_2$	
	Distance	BV	Distance	BV
AE1—F1	2.453 (3)	0.291	2.523 (6)	0.404
AE1—F2	2.538 (3)	0.231	2.583 (6)	0.344
AE1—O8	2.539 (3)	0.321	2.755 (8)	0.281
AE1—O6 ⁴	2.591 (4)	0.278	2.758 (11)	0.278
AE1—O11 ⁸	2.599 (4)	0.273	2.738 (7)	0.294
AE1—O9	2.782 (3)	0.166	2.832 (6)	0.228
AE1—O4	2.863 (3)	0.134	2.939 (6)	0.171
AE1—O7 ⁴	3.016 (3)	0.088	3.103 (6)	0.110
AE2—F2 ³	2.456 (3)	0.289	2.540 (7)	0.386
AE2—F2	2.477 (3)	0.273	2.573 (8)	0.353
AE2—O4 ⁴	2.592 (3)	0.278	2.736 (6)	0.296
AE2—O5 ³	2.612 (3)	0.263	2.795 (6)	0.252
AE2—O2	2.619 (3)	0.258	2.746 (6)	0.288
AE2—O10	2.654 (3)	0.235	2.777 (7)	0.265
AE2—O1 ⁹	2.729 (4)	0.192	2.951 (6)	0.165
AE2—O7 ¹	2.798 (3)	0.159	2.885 (7)	0.198
AE2—O6 ⁴	3.074 (3)	0.075	3.094 (5)	0.112
AE3—F1 ⁷	2.501 (3)	0.256	2.553 (8)	0.373
AE3—F1 ²	2.511 (3)	0.249	2.556 (8)	0.370
AE3—O3 ⁸	2.490 (3)	0.366	2.698 (5)	0.328
AE3—O9	2.602 (3)	0.270	2.710 (7)	0.317
AE3—O10 ¹⁰	2.602 (3)	0.270	2.738 (7)	0.294
AE3—O2 ¹⁰	2.640 (3)	0.244	2.817 (7)	0.237
AE3—O3 ¹⁰	2.930 (4)	0.111	3.117 (7)	0.106
AE3—O8 ¹⁰	2.953 (3)	0.105	3.136 (7)	0.100

Symmetry codes: 1) x, y-1, z; 2) x-1, y, z; 3) -x+1, y-1/2, -z+1; 4) -x+2, y-1/2, -z+1; 5) -x+2, y+1/2, -z+1; 6) -x+2, y-1/2, -z+2; 7) -x+2, y+1/2, -z+2; 8) x, y+1, z; 9) -x+1, y+1/2, -z+1; 10) -x+1, y+1/2, -z+2; 11) x, y, z-1; 12) x+1, y, z; 13) -x+1, y-1/2, -z+2; 14) x+1, y+1, z; 15) x, y, z+1; 16) x-1, y-1, z