

Appendix

Figure A1. Two possible spin configurations in fayalite, modified from Chatterjee and Saha-Dasgupta (2010).

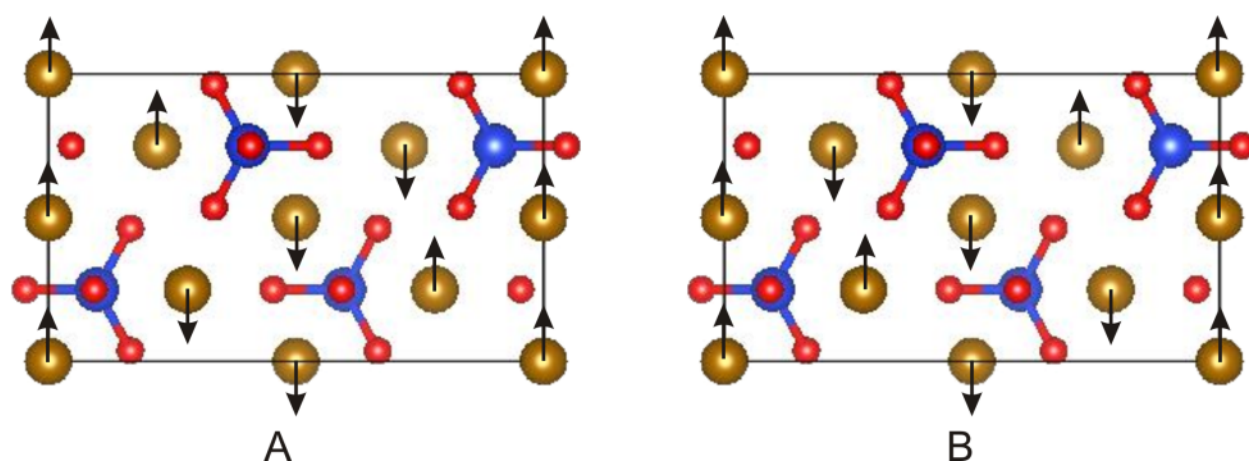


Table A1. Total energy of laihunite-1M, laihunite-2M, and laihunite-3Or in the two possible antiferromagnetic configurations together with fayalite.

| Structure | Configuration A (eV) | Configuration B (eV) |
|---------------|----------------------|----------------------|
| Laihunite-1M | -189.79 | -189.86 |
| Laihunite-2M | -395.08 | -395.21 |
| Laihunite-3Or | -585.00 | -585.09 |
| Fayalite | -205.11 | -205.17 |

Figure A2. Simulated electron diffraction patterns of laihunite-2M (A, C) and laihunite-3Or (B, D). A and B are [001]-zone-axis patterns. C and D are [110]-zone-axis patterns.

