Supplementary Information

Capacity prediction of K-ion batteries: A machine learning based approach for high throughput screening of electrode materials

Souvik Manna[†], Diptendu Roy[†], Sandeep Das[†], and Biswarup Pathak[†*]

[†]Department of Chemistry, Indian Institute of Technology (IIT) Indore, Simrol, Indore 453552, India

*Email: biswarup@iiti.ac.in

Table S3. Cross Validation Score for Random Forest Regression (Number of Trees = 470)..

Table S4. Optimized hyperparameters and mean absolute percentage error (MAPE) for Decision Trees Regression.

Figure S7. Gradual insertion of K ions in electrode material, Mn_4NiO_8 (a) $K_0Mn_4NiO_8$, (b) $K_1Mn_4NiO_8$, (c) $K_2Mn_4NiO_8$, (d) $K_3Mn_4NiO_8$.

Table S5. The calculated binding energy per K insertion for different concentration of K in Mn_4NiO_8.

Figure S8. DFT optimized structures of Mn4NiO8 upon intercalation by four K ions. Here a and b represent two possibilities.

Figure S9. Root mean square displacement (RMSD) of Mn_4NiO_8 structure upon intercalation of K-ions with respect to the unintercalated structure.

Table S6. Predicted capacity and number of K ion intercalated per formula unit.

Text S1. Method of calculating volume of void.

The volume of void (V_{void}) can be calculated as

$$V_{void} = V_{crystal} - (\sum_{i=1}^{n} x_i \frac{4}{3}\pi r_i^3)$$

Where, $V_{crystal}$ is the volume of the lattice, i stands for the constituent elements in the lattice, xi stands for the number of atoms of the constituent element i, ri stands for atomic radius of the constituent elements.

Table S1. Selected descriptors and their feature importance value.

Descriptors	Feature Importance
a	19.99248
b	11.55686
c	13.3455
γ	2.19725
molecular_wt	8.629337
component_length	9.97639
vol_of_void	17.547
heat_atom	13.29175
mean_en	10.01011
s_contribution	17.09857
f_contribution	4.325726
sum_Metal	6.588943
sum_Metalliod	0.453182
sum_Miracle_Radius_[pm]	4.00879
sum_metallic_valence	3.955712
sum_valence_d	3.022948
sum_valence_f	0.884731
sum_polarizability(A^3)	4.702479
sum_specific_heat_(J/g_K)	0.344263
sum_heat_of_fusion_(kJ/mol)	2.49474
sum_thermal_conductivity_(W/(m_K))	1.620195
avg_Period	29.04425
avg_families	11.49841
avg_Mendeleev_Number	0.084387
avg_Miracle_Radius_[pm]	7.843378
avg_Zunger_radii_sum	15.35589
avg_crystal_radius	6.590407
avg_Pauling_Electronegativity	0.236832
avg_number_of_valence_electrons	23.95504
avg_valence_s	9.665605
avg_valence_d	14.02499
avg_valence_f	2.490361
avg_Number_of_unfilled_s_valence_electrons	0.483429
avg_Number_of_unfilled_d_valence_electrons	0.531795
avg_Number_of_unfilled_f_valence_electrons	0.100956

avg_Melting_point_(K)	2.981298
avg_heat_of_fusion_(kJ/mol)	3.01323
var_Atomic_Number	0.141424
var_Period	20.82763
var_group	17.65423
var_Metal	1.141666
var_l_quantum_number	10.8045
var_crystal_radius	3.774943
var_MB_electonegativity	2.089889
var_Gordy_electonegativity	12.28455
var_Mulliken_EN	6.442979
var_Allred-Rockow_electronegativity	39.92961
var_gilmor_number_of_valence_electron	4.017691
var_valence_p	7.147776
var_valence_f	3.392137
var_Number_of_unfilled_p_valence_electrons	0.023094
var_Number_of_unfilled_f_valence_electrons	0.001354
var_outer_shell_electrons	1.653657
var_1st_ionization_potential_(kJ/mol)	8.24177
var_heat_of_vaporization_(kJ/mol)_	1.528509
range_families	5.688928
range_Metal	5.261452
range_Atomic_Radius	7.83484
range_Miracle_Radius_[pm]	2.830836
range_ionic_radius	5.195103
range_MB_electonegativity	7.568182
range_Gordy_electonegativity	14.441
range_metallic_valence	2.962051
range_number_of_valence_electrons	4.307665
range_valence_d	11.85172
range_Number_of_unfilled_d_valence_electrons	0.005627
range_1st_ionization_potential_(kJ/mol)	12.98413
range_specific_heat_(J/g_K)	2.445781
range_heat_of_fusion_(kJ/mol)	7.748805
range_thermal_conductivity_(W/(m_K))	0.747173
range_Cohesive_energy	0.180748

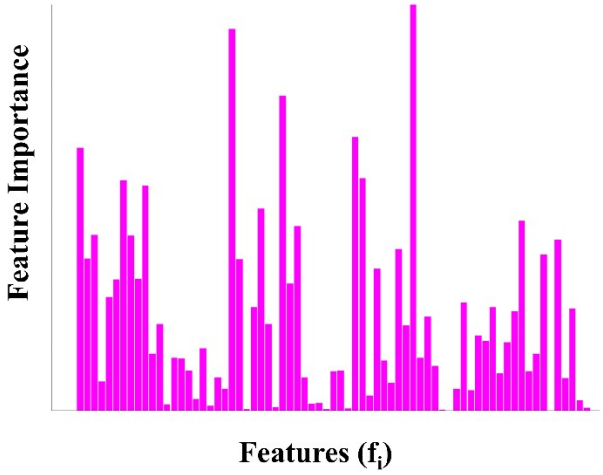

Figure S1. Selection of descriptors based on feature importance where f_i is the descriptors having feature importance greater than zero and 'i' varies from 1 to 71.

Table S2. Elemental properties to generate feature vectors.

Atomic number	Metalloid	Ionic radius	Metallic valence	Number of unfilled s valence electrons	Melting point
Atomic weight	Mendeleev number	Crystal radius	Number of valence electrons	Number of unfilled p valence electrons	Boiling point
Period	L quantum number	Pauling electronegativity	Heat of atomization	Number of unfilled d valence electrons	Density
Group	Atomic radius	MB electronegativity	Valence s	Number of unfilled f valence electrons	Specific heat
Families	Miracle radius	Gordy electronegativity	Valence p	Cohesive energy	Heat of fusion
Metal	Covalent radius	Mulliken electronegativity	Valence d	1st ionization potential	Heat of vaporization
Non-metal	Zunger radius	Allred Rochow electronegativity	Valence f	Polarizability	Thermal conductivity

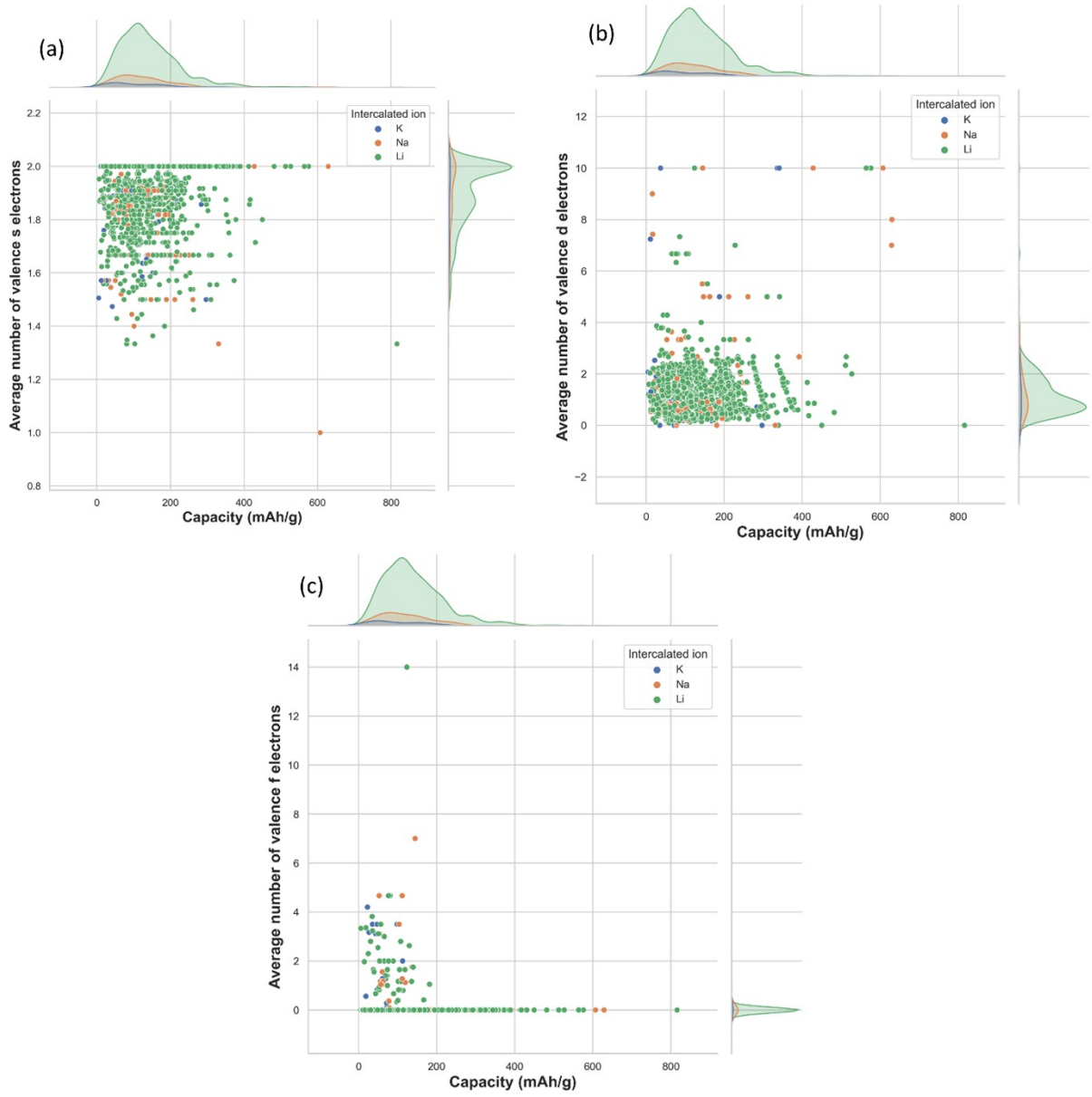

Figure S2. Joint plots for the distribution plot across electronic properties. Change of capacity with (a) s valence electrons, (b) d valence electrons, and (c) f valence electrons.

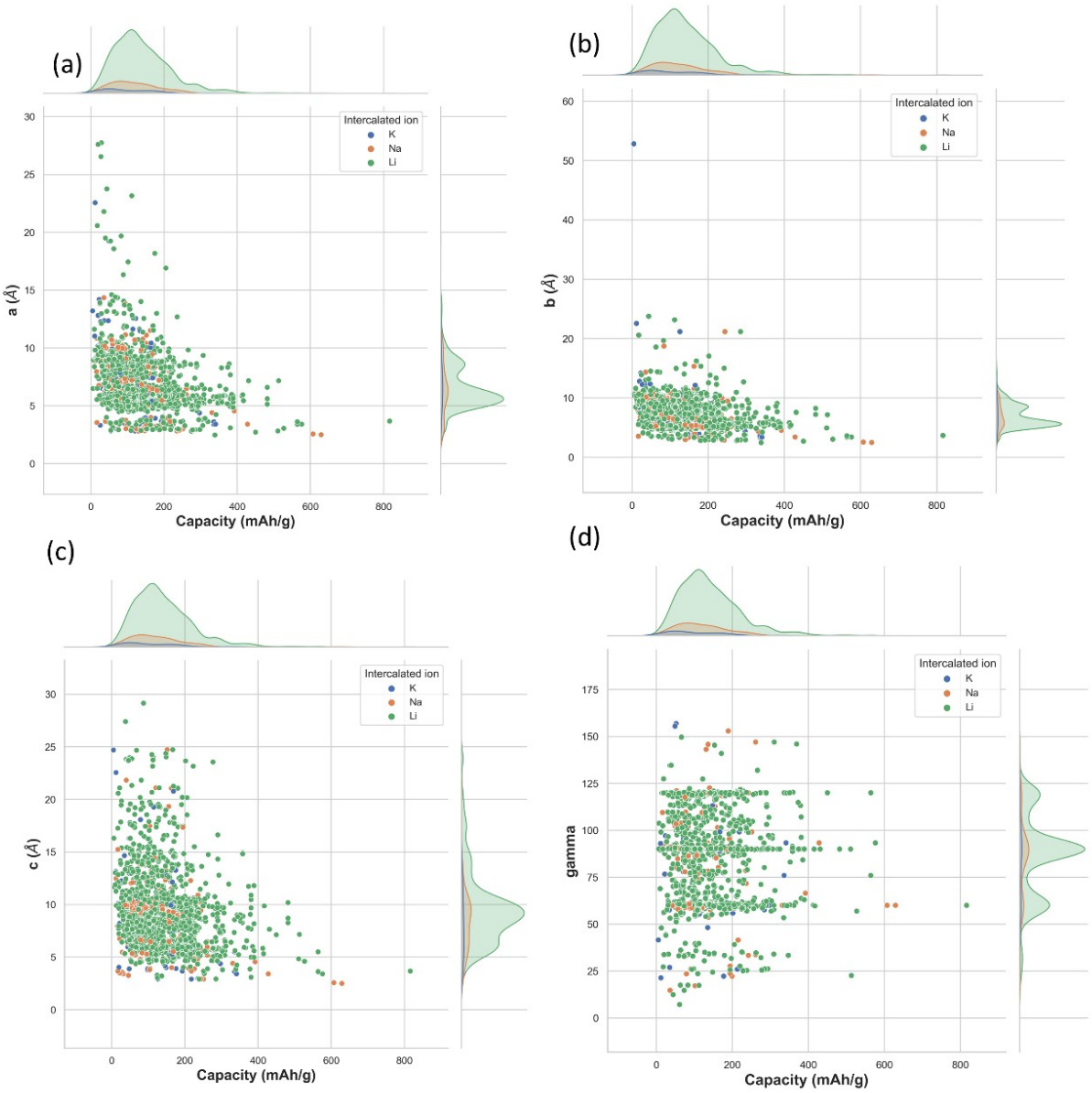

Figure S3. Distribution of capacity with respect to different lattice parameters of electrode materials. Change in capacity with lattice parameter (a) a, (b) b, (c) c, (d) γ.

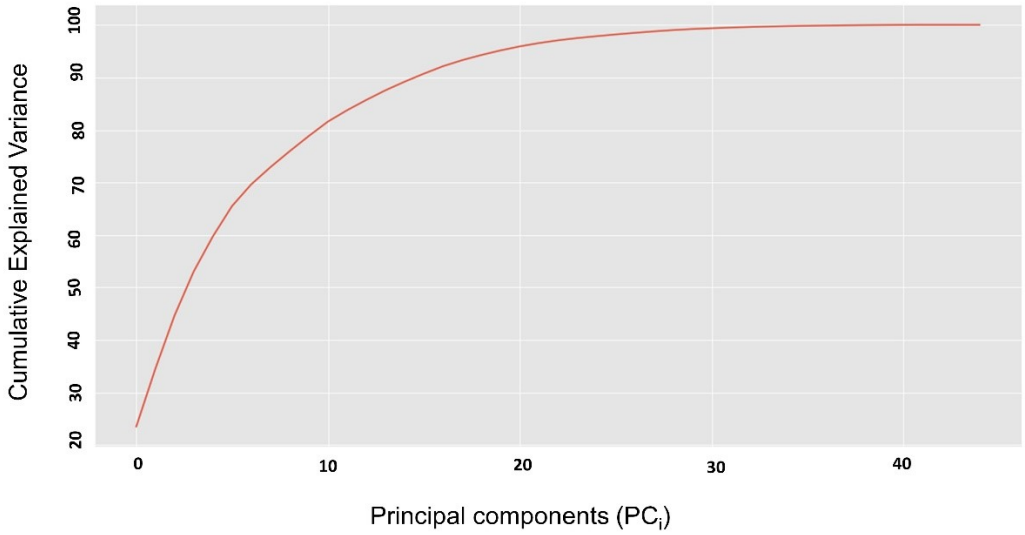

Figure S4. Change of explained variance with each principal component.

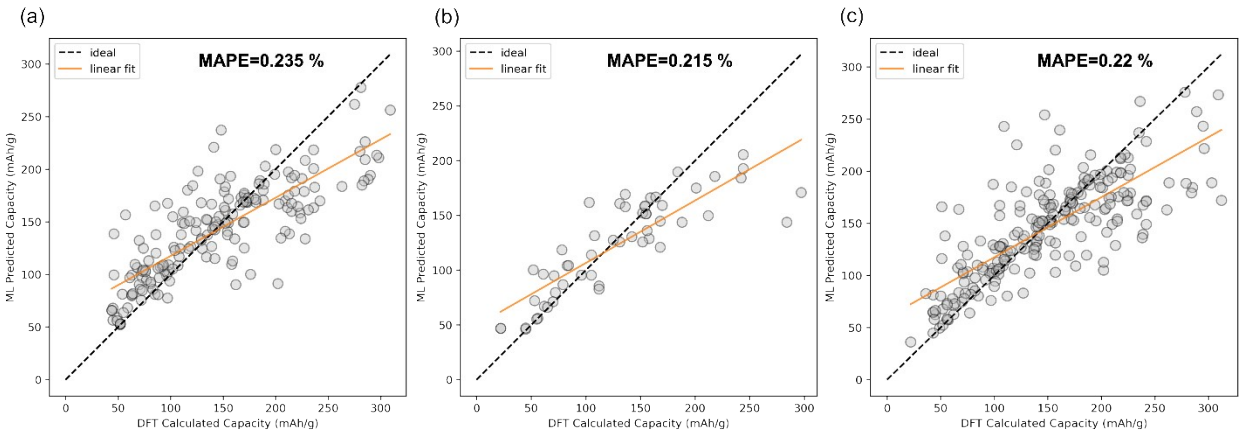

Figure S5. Comparison between ML predicted capacity and DFT calculated capacity for EXR ML model having number of trees=800, min_samples_leaf=3, min_samples_split=2 hyperparameters on (a) Li dataset. (b) Na+K dataset. (c) Li+Na+K dataset.

Text S2. Best hyperparameters found for Random Forest Regression (RFR).

The performance of RFR, an ensemble based ML algorithm has been checked for our dataset. The optimized number of trees needed for the fitting of training set has been found to be 470.

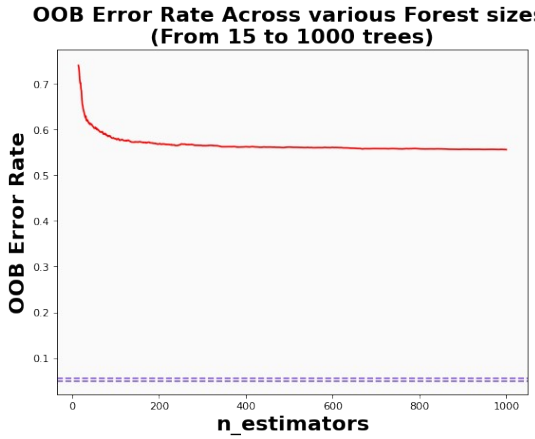

Figure S6. Estimation of optimized number of trees for Random Forest ML model.

Table S3. Cross validation score for Random Forest Regression (Number of Trees = 470).

Number of CV fold	**MAPE**
1	0.55632393
2	0.36491104
3	0.48444393
4	0.38227109
5	0.37742942
6	0.30495874
7	0.23020601
8	0.45309557
9	0.30685957
10	0.46659858
Mean MAPE	**0.39271**

Table S4. Optimized hyperparameters and mean absolute percentage error (MAPE) for Decision Trees Regression.

Max_depth	**Min_samples_leaf**	**Min_samples_split**	**splitter**	**MAPE**
17	3	2	Random	0.38575

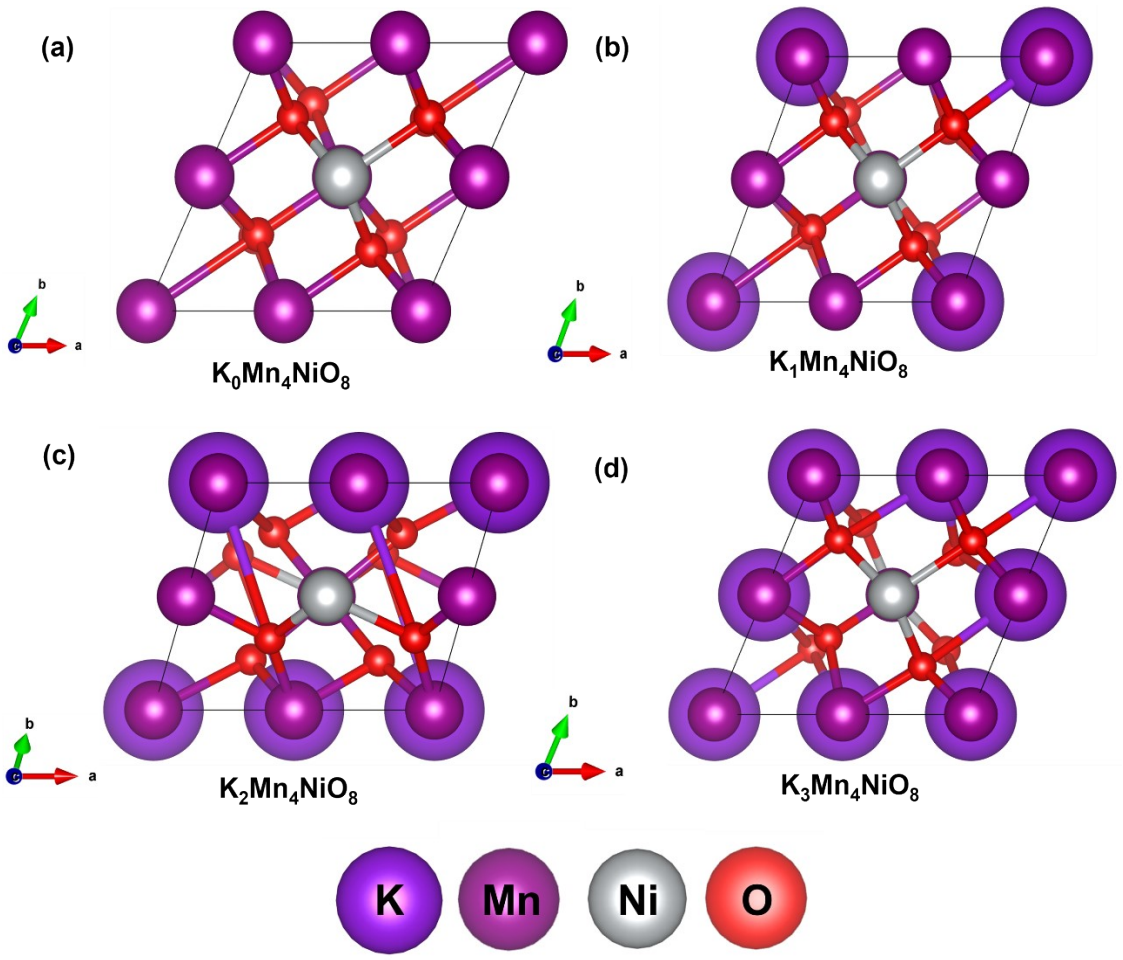

Figure S7. Gradual insertion of K ions in electrode material, Mn_4NiO_8 (a) $K_0Mn_4NiO_8$, (b) $K_1Mn_4NiO_8$, (c) $K_2Mn_4NiO_8$, (d) $K_3Mn_4NiO_8$.

Table S5. The calculated binding energy per K insertion for different concentration of K in Mn_4NiO_8.

Electrode with K insertion	Binding Energy/K insertion (eV)
$K_1Mn_4NiO_8$	-1.83
$K_2Mn_4NiO_8$	-3.15
$K_3Mn_4NiO_8$	-1.97

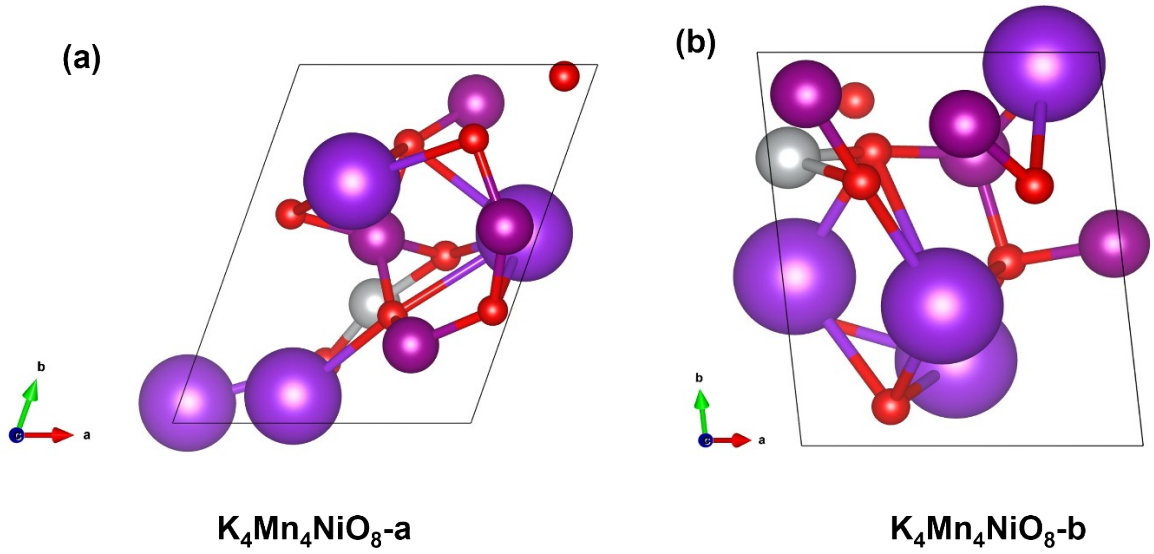

Figure S8. DFT optimized structures of Mn4NiO8 upon intercalation by four K ions. Here a and b represent two possibilities.

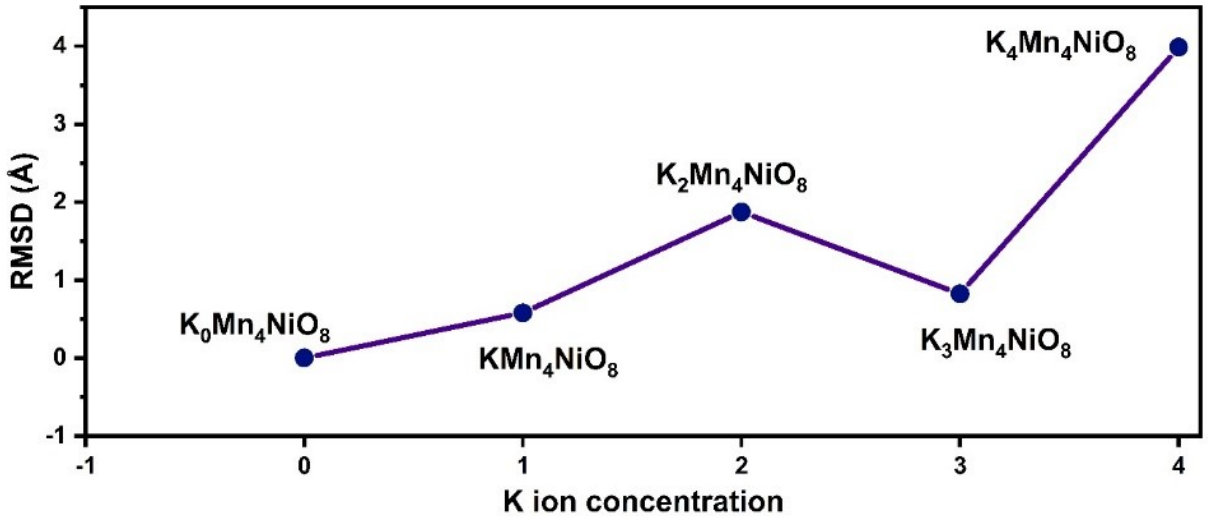

Figure S9. Root mean square displacement (RMSD) of Mn_4NiO_8 structure upon intercalation of K-ions with respect to the unintercalated structure.

Table S6. Predicted capacity and number of K ion intercalated per formula unit.

Electrode materials	Intercalated electrode materials	No. of K ion intercalated	Capacity (mAh/g)
Al2Cu	0.72	K0.72	K0.72Al2Cu
Al3Cr3(SbO8)2	3.99	K3.99	K3.99Al3Cr3(SbO8)2
Ba2(CuO2)3	1.5	K1.5	K1.5Ba2(CuO2)3
Ba2Ti11O24	1.92	K1.92	K1.92Ba2Ti11O24
Ba2VP2O9	1.27	K1.27	K1.27Ba2VP2O9
Ba4Li4Ti19O44	4.26	K4.26	K4.26Ba4Li4Ti19O44
Ba4Nb3O12	2.42	K2.42	K2.42Ba4Nb3O12
Ba6Ta9Ti7O42	1.98	K1.98	K1.98Ba6Ta9Ti7O42
Ba6Ti7(Sb3O14)3	3.75	K3.75	K3.75Ba6Ti7(Sb3O14)3
Ba6Ti7Nb9O42	4.07	K4.07	K4.07Ba6Ti7Nb9O42
BaCaVP2O9	1.66	K1.66	K1.66BaCaVP2O9
BaNaSn	0.97	K0.97	K0.97BaNaSn
Bi	0.12	K0.12	K0.12Bi
Bi(PdO2)2	1.42	K1.42	K1.42Bi(PdO2)2
Bi(PO3)4	1.12	K1.12	K1.12Bi(PO3)4
Bi2(SO4)3	1.73	K1.73	K1.73Bi2(SO4)3
Bi3(PO5)2	2.15	K2.15	K2.15Bi3(PO5)2
BiO2	0.47	K0.47	K0.47BiO2
BiP2O7	1.02	K1.02	K1.02BiP2O7

C	0.03	K0.03	K0.03C
Ca9Co(PO4)7	2.08	K2.08	K2.08Ca9Co(PO4)7
CaFe2(SiO3)4	1.99	K1.99	K1.99CaFe2(SiO3)4
Co	0.14	K0.14	K0.14Co
Co(NiO2)4	2.93	K2.93	K2.93Co(NiO2)4
Co(PO3)3	2.27	K2.27	K2.27Co(PO3)3
Co15O28	1.99	K1.99	K1.99Co15O28
Co2(CO3)3	1.77	K1.77	K1.77Co2(CO3)3
Co2(PO3)5	2.44	K2.44	K2.44Co2(PO3)5
Co2(SO4)3	2.12	K2.12	K2.12Co2(SO4)3
Co21O40	1.58	K1.58	K1.58Co21O40
Co2C2O7	1.28	K1.28	K1.28Co2C2O7
Co2NiO6	2.1	K2.1	K2.1Co2NiO6
Co2P3O10	1.89	K1.89	K1.89Co2P3O10
Co2P5O16	2.83	K2.83	K2.83Co2P5O16
Co3(P2O7)2	2.96	K2.96	K2.96Co3(P2O7)2
Co3(SeO3)4	3.18	K3.18	K3.18Co3(SeO3)4
Co3BiO8	2.06	K2.06	K2.06Co3BiO8
Co3Cu3(TeO8)2	4.07	K4.07	K4.07Co3Cu3(TeO8)2
Co3Ni(PO4)4	3.93	K3.93	K3.93Co3Ni(PO4)4
Co3Ni3(TeO8)2	5.44	K5.44	K5.44Co3Ni3(TeO8)2
Co3NiO8	2.56	K2.56	K2.56Co3NiO8
Co3P3O11	1.68	K1.68	K1.68Co3P3O11
Co3P4O15	2.14	K2.14	K2.14Co3P4O15

Co3SbO8	2.21	K2.21	K2.21Co3SbO8
Co3Sn(PO4)4	3.84	K3.84	K3.84Co3Sn(PO4)4
Co3SnO8	2.35	K2.35	K2.35Co3SnO8
Co3TeO8	2.57	K2.57	K2.57Co3TeO8
Co4NiO8	3.03	K3.03	K3.03Co4NiO8
Co4TeO8	2.31	K2.31	K2.31Co4TeO8
Co5(P2O7)4	4.8	K4.8	K4.8Co5(P2O7)4
Co5NiO12	4.09	K4.09	K4.09Co5NiO12
Co5SbO12	4	K4	K4Co5SbO12
Co5Te3O16	4.76	K4.76	K4.76Co5Te3O16
Co6P7O24	2.72	K2.72	K2.72Co6P7O24
Co7O12	2.52	K2.52	K2.52Co7O12
CoBO3	0.77	K0.77	K0.77CoBO3
CoCu(PO4)2	2.27	K2.27	K2.27CoCu(PO4)2
CoF3	0.61	K0.61	K0.61CoF3
CoH8(CO5)2	1.69	K1.69	K1.69CoH8(CO5)2
CoNi(PO4)2	2.3	K2.3	K2.3CoNi(PO4)2
CoO2	0.72	K0.72	K0.72CoO2
CoP2O7	1.43	K1.43	K1.43CoP2O7
CoPHO5	1.41	K1.41	K1.41CoPHO5
CoPO4	0.93	K0.93	K0.93CoPO4
CoS2	0.94	K0.94	K0.94CoS2
CoSbO4	1.37	K1.37	K1.37CoSbO4
CoSiO4	0.97	K0.97	K0.97CoSiO4

CoSn(PO4)2	1.87	K1.87	K1.87CoSn(PO4)2
Cr(CoO3)2	1.41	K1.41	K1.41Cr(CoO3)2
Cr(GeO3)2	1.58	K1.58	K1.58Cr(GeO3)2
Cr(PO3)4	1.73	K1.73	K1.73Cr(PO3)4
Cr(SiO3)2	1.21	K1.21	K1.21Cr(SiO3)2
Cr(SO4)2	1.12	K1.12	K1.12Cr(SO4)2
Cr(WO4)3	2.92	K2.92	K2.92Cr(WO4)3
Cr10Fe5O24	4.07	K4.07	K4.07Cr10Fe5O24
Cr2(PO4)3	1.56	K1.56	K1.56Cr2(PO4)3
Cr2(PS4)3	1.22	K1.22	K1.22Cr2(PS4)3
Cr2(PS4)3	1.22	K1.22	K1.22Cr2(PS4)3
Cr2(SO4)3	1.81	K1.81	K1.81Cr2(SO4)3
Cr2P2O9	1.49	K1.49	K1.49Cr2P2O9
Cr2P3O10	1.69	K1.69	K1.69Cr2P3O10
Cr3(CuO6)2	2.08	K2.08	K2.08Cr3(CuO6)2
Cr3(FeO4)2	2.05	K2.05	K2.05Cr3(FeO4)2
Cr3(FeO6)2	1.79	K1.79	K1.79Cr3(FeO6)2
Cr3(P2O7)2	2.21	K2.21	K2.21Cr3(P2O7)2
Cr3Co(PO4)4	3.29	K3.29	K3.29Cr3Co(PO4)4
Cr3Co3(SbO8)2	4.35	K4.35	K4.35Cr3Co3(SbO8)2
Cr3Co3(TeO8)2	4.3	K4.3	K4.3Cr3Co3(TeO8)2
Cr3Cu(PO4)4	3.18	K3.18	K3.18Cr3Cu(PO4)4
Cr3Fe2Sb3O16	5	K5	K5Cr3Fe2Sb3O16
Cr3Fe3(TeO8)2	4.9	K4.9	K4.9Cr3Fe3(TeO8)2

Cr3Ni(PO4)4	3.39	K3.39	K3.39Cr3Ni(PO4)4
Cr3Ni(SO4)6	3.31	K3.31	K3.31Cr3Ni(SO4)6
Cr3O8	1.26	K1.26	K1.26Cr3O8
Cr3P4O15	1.85	K1.85	K1.85Cr3P4O15
Cr3P6WO24	2.85	K2.85	K2.85Cr3P6WO24
Cr3SbO8	2.02	K2.02	K2.02Cr3SbO8
Cr3Sn3(SbO8)2	4.56	K4.56	K4.56Cr3Sn3(SbO8)2
Cr3TeO8	2	K2	K2Cr3TeO8
Cr3WO8	1.82	K1.82	K1.82Cr3WO8
Cr4(PO4)3	1.52	K1.52	K1.52Cr4(PO4)3
Cr4GaS8	2.54	K2.54	K2.54Cr4GaS8
Cr4P7O24	2.57	K2.57	K2.57Cr4P7O24
Cr4Si4O13	2.42	K2.42	K2.42Cr4Si4O13
Cr5(PO4)4	2.04	K2.04	K2.04Cr5(PO4)4
Cr5(Si2O7)2	2.49	K2.49	K2.49Cr5(Si2O7)2
Cr5O12	1.22	K1.22	K1.22Cr5O12
Cr6P7O24	2.41	K2.41	K2.41Cr6P7O24
CrCo(PO4)2	1.94	K1.94	K1.94CrCo(PO4)2
CrCo3(PO4)4	3.82	K3.82	K3.82CrCo3(PO4)4
CrCo3O8	2.17	K2.17	K2.17CrCo3O8
CrCo5O12	2.93	K2.93	K2.93CrCo5O12
CrCu(PO4)2	1.89	K1.89	K1.89CrCu(PO4)2
CrF3	0.58	K0.58	K0.58CrF3
CrF4	0.71	K0.71	K0.71CrF4

CrF6	1.01	K1.01	K1.01CrF6
CrFe(PO4)2	1.92	K1.92	K1.92CrFe(PO4)2
CrFe3Cu2(PO4)6	4.21	K4.21	K4.21CrFe3Cu2(PO4)6
CrN2	0.67	K0.67	K0.67CrN2
CrNi(PO4)2	2.04	K2.04	K2.04CrNi(PO4)2
CrO2	0.51	K0.51	K0.51CrO2
CrO3	0.68	K0.68	K0.68CrO3
CrP2O7	1.22	K1.22	K1.22CrP2O7
CrP2S7	1.71	K1.71	K1.71CrP2S7
CrPHO5	1.43	K1.43	K1.43CrPHO5
CrPO4	0.65	K0.65	K0.65CrPO4
CrPO4F	1.27	K1.27	K1.27CrPO4F
CrPO5	0.97	K0.97	K0.97CrPO5
CrS2	0.62	K0.62	K0.62CrS2
CrS2	0.62	K0.62	K0.62CrS2
CrSn(PO4)2	1.7	K1.7	K1.7CrSn(PO4)2
CrTe(WO6)2	2.94	K2.94	K2.94CrTe(WO6)2
Cs2CoF6	1.49	K1.49	K1.49Cs2CoF6
Cs2CrF6	1.79	K1.79	K1.79Cs2CrF6
Cs2CuF6	1.53	K1.53	K1.53Cs2CuF6
Cs2MnF6	1.43	K1.43	K1.43Cs2MnF6
Cs2MnO4	1.23	K1.23	K1.23Cs2MnO4
Cs2MoBr6	2.87	K2.87	K2.87Cs2MoBr6
Cs2MoCl6	1.84	K1.84	K1.84Cs2MoCl6

Cs2NiF6	1.44	K1.44	K1.44Cs2NiF6
Cs2SbBr6	2.68	K2.68	K2.68Cs2SbBr6
Cs2SbCl6	1.89	K1.89	K1.89Cs2SbCl6
Cu	0.06	K0.06	K0.06Cu
Cu(PO3)3	1.55	K1.55	K1.55Cu(PO3)3
Cu(TeO3)4	4.27	K4.27	K4.27Cu(TeO3)4
Cu2P3O10	2.05	K2.05	K2.05Cu2P3O10
Cu3(P2O7)2	2.27	K2.27	K2.27Cu3(P2O7)2
Cu3O4	1.33	K1.33	K1.33Cu3O4
Cu3Sb(PO4)4	3.43	K3.43	K3.43Cu3Sb(PO4)4
Cu4(PO4)3	2.07	K2.07	K2.07Cu4(PO4)3
Cu5(Si2O7)2	2.33	K2.33	K2.33Cu5(Si2O7)2
Cu5P3O13	2.25	K2.25	K2.25Cu5P3O13
Cu9(PO4)8	2.17	K2.17	K2.17Cu9(PO4)8
CuCO3	0.71	K0.71	K0.71CuCO3
CuHCO4	0.79	K0.79	K0.79CuHCO4
CuO	0.65	K0.65	K0.65CuO
CuP4O11	1.69	K1.69	K1.69CuP4O11
CuPO4	0.97	K0.97	K0.97CuPO4
CuS2	0.73	K0.73	K0.73CuS2
CuSb(PO4)2	2.42	K2.42	K2.42CuSb(PO4)2
CuSe	0.76	K0.76	K0.76CuSe
Fe(CoO3)2	2.52	K2.52	K2.52Fe(CoO3)2
Fe(PO3)3	2.25	K2.25	K2.25Fe(PO3)3

Fe(PO3)4	1.72	K1.72	K1.72Fe(PO3)4
Fe(PS3)2	2.04	K2.04	K2.04Fe(PS3)2
Fe(SbO3)4	3.57	K3.57	K3.57Fe(SbO3)4
Fe2(CO3)3	1.72	K1.72	K1.72Fe2(CO3)3
Fe2(PO4)3	1.66	K1.66	K1.66Fe2(PO4)3
Fe2(SO4)3	1.93	K1.93	K1.93Fe2(SO4)3
Fe2C2O7	1.38	K1.38	K1.38Fe2C2O7
Fe2Co3O10	2.74	K2.74	K2.74Fe2Co3O10
Fe2Ni(PO4)3	2.22	K2.22	K2.22Fe2Ni(PO4)3
Fe2OF3	0.78	K0.78	K0.78Fe2OF3
Fe2P3O10	2.12	K2.12	K2.12Fe2P3O10
Fe2P5O16	2.85	K2.85	K2.85Fe2P5O16
Fe3(P2O7)2	2.3	K2.3	K2.3Fe3(P2O7)2
Fe3(P3O10)2	1.99	K1.99	K1.99Fe3(P3O10)2
Fe3(SiO4)2	1.78	K1.78	K1.78Fe3(SiO4)2
Fe3(SnS4)2	2.69	K2.69	K2.69Fe3(SnS4)2
Fe3Co(PO4)4	3.97	K3.97	K3.97Fe3Co(PO4)4
Fe3Co3(SbO8)2	5.77	K5.77	K5.77Fe3Co3(SbO8)2
Fe3Co3(TeO8)2	5.27	K5.27	K5.27Fe3Co3(TeO8)2
Fe3Cu(PO4)4	3.17	K3.17	K3.17Fe3Cu(PO4)4
Fe3Ni(PO4)4	3.89	K3.89	K3.89Fe3Ni(PO4)4
Fe3O4	1.1	K1.1	K1.1Fe3O4
Fe3OF5	1.03	K1.03	K1.03Fe3OF5
Fe3OF7	1.42	K1.42	K1.42Fe3OF7

Fe3P3O11	1.45	K1.45	K1.45Fe3P3O11
Fe3P3O13	2.47	K2.47	K2.47Fe3P3O13
Fe3P4O15	1.97	K1.97	K1.97Fe3P4O15
Fe4(PO4)3	1.98	K1.98	K1.98Fe4(PO4)3
Fe4OF7	1.13	K1.13	K1.13Fe4OF7
Fe4OF8	1.36	K1.36	K1.36Fe4OF8
Fe5(P2O7)4	2.86	K2.86	K2.86Fe5(P2O7)4
Fe5(PO4)4	2.69	K2.69	K2.69Fe5(PO4)4
Fe5Co3O16	4.3	K4.3	K4.3Fe5Co3O16
Fe5Ni(PO4)6	4.19	K4.19	K4.19Fe5Ni(PO4)6
Fe5O8	0.94	K0.94	K0.94Fe5O8
Fe5OF11	2.13	K2.13	K2.13Fe5OF11
Fe5P3O13	2.63	K2.63	K2.63Fe5P3O13
Fe5P6WO24	3.08	K3.08	K3.08Fe5P6WO24
Fe5Sb(PO4)6	3.72	K3.72	K3.72Fe5Sb(PO4)6
Fe7(OF3)3	2.01	K2.01	K2.01Fe7(OF3)3
Fe7(OF7)2	2.93	K2.93	K2.93Fe7(OF7)2
Fe7(PO4)8	3.84	K3.84	K3.84Fe7(PO4)8
Fe7O3F13	2.83	K2.83	K2.83Fe7O3F13
Fe7O7F	1.61	K1.61	K1.61Fe7O7F
FeCl4	1.39	K1.39	K1.39FeCl4
FeClO	0.55	K0.55	K0.55FeClO
FeCo3(PO4)4	4.02	K4.02	K4.02FeCo3(PO4)4
FeCo3O8	2.36	K2.36	K2.36FeCo3O8

FeCo5O12	3.33	K3.33	K3.33FeCo5O12
FeCo9O20	4.8	K4.8	K4.8FeCo9O20
FeCoO4	1.5	K1.5	K1.5FeCoO4
FeCSO7	1.82	K1.82	K1.82FeCSO7
FeCu(PO4)2	2.19	K2.19	K2.19FeCu(PO4)2
FeCuS2	0.92	K0.92	K0.92FeCuS2
FeF3	0.53	K0.53	K0.53FeF3
FeH12(SO7)2	1.86	K1.86	K1.86FeH12(SO7)2
FeH4(SO5)2	2.27	K2.27	K2.27FeH4(SO5)2
FeNi(PO4)2	2.31	K2.31	K2.31FeNi(PO4)2
FeNi3(PO4)4	3.98	K3.98	K3.98FeNi3(PO4)4
FeO2	0.62	K0.62	K0.62FeO2
FeP2O7	1.42	K1.42	K1.42FeP2O7
FePHO5	1.47	K1.47	K1.47FePHO5
FePO4	1.09	K1.09	K1.09FePO4
FePO4	1.04	K1.04	K1.04FePO4
FePO4	0.64	K0.64	K0.64FePO4
FePO4	1.01	K1.01	K1.01FePO4
FePO4	0.93	K0.93	K0.93FePO4
FeS2	0.93	K0.93	K0.93FeS2
FeSb3	1.13	K1.13	K1.13FeSb3
FeWClO4	1.13	K1.13	K1.13FeWClO4
Ge3(MoO6)2	2.24	K2.24	K2.24Ge3(MoO6)2
In2CuSe4	2.5	K2.5	K2.5In2CuSe4

InBi	0.97	K0.97	K0.97InBi
K(Mo2O3)4	4.24	K4.24	K4.24K(Mo2O3)4
K(MoS)9	2.38	K2.38	K2.38K(MoS)9
K(WO3)3	1.78	K1.78	K1.78K(WO3)3
K(WO3)6	2.5	K2.5	K2.5K(WO3)6
K11Mn4O16	4.26	K4.26	K4.26K11Mn4O16
K2CoF6	1.18	K1.18	K1.18K2CoF6
K2CrF6	1.55	K1.55	K1.55K2CrF6
K2CrO4	1.21	K1.21	K1.21K2CrO4
K2CuPCO7	1.32	K1.32	K1.32K2CuPCO7
K2Li2CoO4	1.11	K1.11	K1.11K2Li2CoO4
K2Li2NiO4	1.1	K1.1	K1.1K2Li2NiO4
K2LiMn2O4	1.46	K1.46	K1.46K2LiMn2O4
K2MnF6	1.22	K1.22	K1.22K2MnF6
K2MnPCO7	1.4	K1.4	K1.4K2MnPCO7
K2MoCl6	1.64	K1.64	K1.64K2MoCl6
K2NiPCO7	1.4	K1.4	K1.4K2NiPCO7
K2SnPCO7	1.45	K1.45	K1.45K2SnPCO7
K2Ti8O17	3.03	K3.03	K3.03K2Ti8O17
K2TlPCO7	1.28	K1.28	K1.28K2TlPCO7
K2VPO6	1.05	K1.05	K1.05K2VPO6
K3(FeSe)8	2.18	K2.18	K2.18K3(FeSe)8
K4Co2O5	1.69	K1.69	K1.69K4Co2O5
K4Li3Mn2O8	2.11	K2.11	K2.11K4Li3Mn2O8

K5Nb16(O5F2)4	1.45	K1.45	K1.45K5Nb16(O5F2)4
K7(Mo9S11)4	0.45	K0.45	K0.45K7(Mo9S11)4
KBiPCO7	1.74	K1.74	K1.74KBiPCO7
KC	0.33	K0.33	K0.33KC
KCrPCO7	1.42	K1.42	K1.42KCrPCO7
KFe2F6	1.54	K1.54	K1.54KFe2F6
KFePCO7	1.6	K1.6	K1.6KFePCO7
KLiSb(PO4)2	1.44	K1.44	K1.44KLiSb(PO4)2
KLiTi2(PO5)2	1.37	K1.37	K1.37KLiTi2(PO5)2
KMn2O4	1.17	K1.17	K1.17KMn2O4
KMnP3HO10	1.75	K1.75	K1.75KMnP3HO10
KMnPCO7	1.75	K1.75	K1.75KMnPCO7
KNb2O5	1.52	K1.52	K1.52KNb2O5
KNb2PO8	1.18	K1.18	K1.18KNb2PO8
KPrPCO7	1.26	K1.26	K1.26KPrPCO7
KTi2(PO4)3	1.66	K1.66	K1.66KTi2(PO4)3
KTiAsO5	1.15	K1.15	K1.15KTiAsO5
KTiPCO7	1.36	K1.36	K1.36KTiPCO7
KVPCO7	1.33	K1.33	K1.33KVPCO7
La20Cu9O40	2.89	K2.89	K2.89La20Cu9O40
La2MoO6	1.6	K1.6	K1.6La2MoO6
La2Ti2CrO9	2.23	K2.23	K2.23La2Ti2CrO9
La3MnO7	2.05	K2.05	K2.05La3MnO7
La3Ti3CrO12	2.61	K2.61	K2.61La3Ti3CrO12

La3Ti4O12	1.98	K1.98	K1.98La3Ti4O12
La4CoO8	1.62	K1.62	K1.62La4CoO8
La4FeO8	1.55	K1.55	K1.55La4FeO8
La4MnO8	1.97	K1.97	K1.97La4MnO8
La4NiO8	1.57	K1.57	K1.57La4NiO8
La4Ti3O12	1.97	K1.97	K1.97La4Ti3O12
La6Mn3O14	2.61	K2.61	K2.61La6Mn3O14
La8Cu3O16	1.85	K1.85	K1.85La8Cu3O16
LaTi2O6	1.25	K1.25	K1.25LaTi2O6
Li(BC)2	0.2	K0.2	K0.2Li(BC)2
Li(FeO2)2	1.08	K1.08	K1.08Li(FeO2)2
Li(NiO2)2	1.1	K1.1	K1.1Li(NiO2)2
Li(NiO2)5	2.81	K2.81	K2.81Li(NiO2)5
Li(ReO3)5	2.87	K2.87	K2.87Li(ReO3)5
Li10Cr3P6(O4F)6	3.27	K3.27	K3.27Li10Cr3P6(O4F)6
Li11(FeO3)4	2.13	K2.13	K2.13Li11(FeO3)4
Li12Nb14ZnO42	2.61	K2.61	K2.61Li12Nb14ZnO42
Li12Ni11O28	5.15	K5.15	K5.15Li12Ni11O28
Li13Mn8O24	3.94	K3.94	K3.94Li13Mn8O24
Li15(FeO4)4	2.04	K2.04	K2.04Li15(FeO4)4
Li17(Co4O9)2	3.3	K3.3	K3.3Li17(Co4O9)2
Li19(FeAs)20	0.84	K0.84	K0.84Li19(FeAs)20
Li2(FeO2)3	1.24	K1.24	K1.24Li2(FeO2)3
Li2(FeO2)5	2.35	K2.35	K2.35Li2(FeO2)5

Li2(NiO2)3	1.15	K1.15	K1.15Li2(NiO2)3
Li2(NiO2)3	1.29	K1.29	K1.29Li2(NiO2)3
Li2C	0.1	K0.1	K0.1Li2C
Li2Co(NiO3)2	1.04	K1.04	K1.04Li2Co(NiO3)2
Li2Co(PO4)2	0.91	K0.91	K0.91Li2Co(PO4)2
Li2CoNi3O8	1.68	K1.68	K1.68Li2CoNi3O8
Li2CoO3	0.98	K0.98	K0.98Li2CoO3
Li2Cr(FeO3)2	1.16	K1.16	K1.16Li2Cr(FeO3)2
Li2Cr(PO4)2	1.15	K1.15	K1.15Li2Cr(PO4)2
Li2Cr(Si2O5)3	1.97	K1.97	K1.97Li2Cr(Si2O5)3
Li2Cr2FeO6	1.3	K1.3	K1.3Li2Cr2FeO6
Li2Cr2P4H3O16	2.53	K2.53	K2.53Li2Cr2P4H3O16
Li2Cr3(CO3)6	3.11	K3.11	K3.11Li2Cr3(CO3)6
Li2Cr3(CoO4)3	3.35	K3.35	K3.35Li2Cr3(CoO4)3
Li2Cr3CoO8	2.07	K2.07	K2.07Li2Cr3CoO8
Li2Cr3CoO8	1.97	K1.97	K1.97Li2Cr3CoO8
Li2Cr3FeO8	1.7	K1.7	K1.7Li2Cr3FeO8
Li2Cr3NiO8	1.52	K1.52	K1.52Li2Cr3NiO8
Li2Cr3NiO8	1.63	K1.63	K1.63Li2Cr3NiO8
Li2Cr3O6	1.37	K1.37	K1.37Li2Cr3O6
Li2CrF6	1.38	K1.38	K1.38Li2CrF6
Li2CrFe3O8	1.58	K1.58	K1.58Li2CrFe3O8
Li2CrO4	0.83	K0.83	K0.83Li2CrO4
Li2CuAsCO7	1.17	K1.17	K1.17Li2CuAsCO7

Li2CuP2O7	1.12	K1.12	K1.12Li2CuP2O7
Li2CuSbO5	1.17	K1.17	K1.17Li2CuSbO5
Li2Fe(BO3)2	0.85	K0.85	K0.85Li2Fe(BO3)2
Li2Fe(NiO3)2	0.89	K0.89	K0.89Li2Fe(NiO3)2
Li2Fe(PO4)2	0.91	K0.91	K0.91Li2Fe(PO4)2
Li2Fe(PO4)2	1.39	K1.39	K1.39Li2Fe(PO4)2
Li2Fe2P4H3O16	2.54	K2.54	K2.54Li2Fe2P4H3O16
Li2Fe3CoO8	1.84	K1.84	K1.84Li2Fe3CoO8
Li2Fe3CuO8	1.4	K1.4	K1.4Li2Fe3CuO8
Li2Fe3NiO8	1.59	K1.59	K1.59Li2Fe3NiO8
Li2FeNi3O8	1.8	K1.8	K1.8Li2FeNi3O8
Li2FeOF3	0.89	K0.89	K0.89Li2FeOF3
Li2FePCO7	0.98	K0.98	K0.98Li2FePCO7
Li2FePCO7	0.94	K0.94	K0.94Li2FePCO7
Li2FePO5	1.05	K1.05	K1.05Li2FePO5
Li2Mg11(WO4)12	1.43	K1.43	K1.43Li2Mg11(WO4)12
Li2Mg3Ti6O16	1.79	K1.79	K1.79Li2Mg3Ti6O16
Li2MgCo13O28	5.31	K5.31	K5.31Li2MgCo13O28
Li2MgCo3O8	1.48	K1.48	K1.48Li2MgCo3O8
Li2MgNi3O8	1.7	K1.7	K1.7Li2MgNi3O8
Li2Mn(FeO3)2	0.97	K0.97	K0.97Li2Mn(FeO3)2
Li2Mn(NiO3)2	1.32	K1.32	K1.32Li2Mn(NiO3)2
Li2Mn(PO4)2	1.19	K1.19	K1.19Li2Mn(PO4)2
Li2Mn2P4H3O16	2.39	K2.39	K2.39Li2Mn2P4H3O16

Li2Mn2Si3O10	1.82	K1.82	K1.82Li2Mn2Si3O10
Li2Mn3(BO3)3	1.13	K1.13	K1.13Li2Mn3(BO3)3
Li2Mn3(BO3)3	1.53	K1.53	K1.53Li2Mn3(BO3)3
Li2Mn3(FeO4)3	3.55	K3.55	K3.55Li2Mn3(FeO4)3
Li2Mn3Cr3O12	3.26	K3.26	K3.26Li2Mn3Cr3O12
Li2Mn3NiO8	1.41	K1.41	K1.41Li2Mn3NiO8
Li2Mn3O6	1.1	K1.1	K1.1Li2Mn3O6
Li2Mn3O7	1.25	K1.25	K1.25Li2Mn3O7
Li2Mn5(FeO6)2	3.36	K3.36	K3.36Li2Mn5(FeO6)2
Li2MnBAsO7	1.18	K1.18	K1.18Li2MnBAsO7
Li2MnBPO7	1.07	K1.07	K1.07Li2MnBPO7
Li2MnCr3O8	1.8	K1.8	K1.8Li2MnCr3O8
Li2MnCr3O8	2.28	K2.28	K2.28Li2MnCr3O8
Li2MnCr3O8	2.08	K2.08	K2.08Li2MnCr3O8
Li2MnF5	0.87	K0.87	K0.87Li2MnF5
Li2MnF6	1.09	K1.09	K1.09Li2MnF6
Li2MnFe3O8	1.56	K1.56	K1.56Li2MnFe3O8
Li2MnNi3O8	1.82	K1.82	K1.82Li2MnNi3O8
Li2MnOF3	0.79	K0.79	K0.79Li2MnOF3
Li2MnP2HO8	1.21	K1.21	K1.21Li2MnP2HO8
Li2MnPCO7	1.18	K1.18	K1.18Li2MnPCO7
Li2MnSiCO7	1.02	K1.02	K1.02Li2MnSiCO7
Li2MnV(PO4)3	1.42	K1.42	K1.42Li2MnV(PO4)3
Li2MnV2O6	1.23	K1.23	K1.23Li2MnV2O6

Li2MnV3O8	1.74	K1.74	K1.74Li2MnV3O8
Li2Mo(PO4)2	1.16	K1.16	K1.16Li2Mo(PO4)2
Li2Nb2Fe3O10	2.63	K2.63	K2.63Li2Nb2Fe3O10
Li2Nb4ZnO12	2.58	K2.58	K2.58Li2Nb4ZnO12
Li2Nb6NiO18	3.5	K3.5	K3.5Li2Nb6NiO18
Li2Ni2SnO6	0.94	K0.94	K0.94Li2Ni2SnO6
Li2Ni3(BO3)3	0.96	K0.96	K0.96Li2Ni3(BO3)3
Li2Ni3TeO8	1.75	K1.75	K1.75Li2Ni3TeO8
Li2Ni5O9	1.97	K1.97	K1.97Li2Ni5O9
Li2Sn(BO3)2	0.93	K0.93	K0.93Li2Sn(BO3)2
Li2Ti(BO3)2	0.75	K0.75	K0.75Li2Ti(BO3)2
Li2Ti(FeO3)2	1.12	K1.12	K1.12Li2Ti(FeO3)2
Li2Ti(NiO3)2	1.01	K1.01	K1.01Li2Ti(NiO3)2
Li2Ti(TeO4)3	2.38	K2.38	K2.38Li2Ti(TeO4)3
Li2Ti2Fe3O10	2.34	K2.34	K2.34Li2Ti2Fe3O10
Li2Ti2Mn5O12	2.89	K2.89	K2.89Li2Ti2Mn5O12
Li2Ti3NiO8	1.13	K1.13	K1.13Li2Ti3NiO8
Li2Ti3V3O12	2.29	K2.29	K2.29Li2Ti3V3O12
Li2Ti6Zn3O16	2.64	K2.64	K2.64Li2Ti6Zn3O16
Li2Ti7Nb6O30	3.57	K3.57	K3.57Li2Ti7Nb6O30
Li2TiCr3O8	2.09	K2.09	K2.09Li2TiCr3O8
Li2TiFe3O8	1.33	K1.33	K1.33Li2TiFe3O8
Li2TiV3O8	1.34	K1.34	K1.34Li2TiV3O8
Li2TiV3O8	1.06	K1.06	K1.06Li2TiV3O8

Li2V(CO3)3	1.07	K1.07	K1.07Li2V(CO3)3
Li2V(OF)2	0.8	K0.8	K0.8Li2V(OF)2
Li2V(PO4)2	1.3	K1.3	K1.3Li2V(PO4)2
Li2V(Si2O5)3	1.79	K1.79	K1.79Li2V(Si2O5)3
Li2V2FeO6	1.11	K1.11	K1.11Li2V2FeO6
Li2V2SiGeO10	1.35	K1.35	K1.35Li2V2SiGeO10
Li2V3CoO8	1.4	K1.4	K1.4Li2V3CoO8
Li2V3CrO8	1.85	K1.85	K1.85Li2V3CrO8
Li2V3O3F5	1.03	K1.03	K1.03Li2V3O3F5
Li2V5Cr2O12	3.02	K3.02	K3.02Li2V5Cr2O12
Li2VBPO7	0.79	K0.79	K0.79Li2VBPO7
Li2VCr2O6	1.45	K1.45	K1.45Li2VCr2O6
Li2VCr3O8	1.95	K1.95	K1.95Li2VCr3O8
Li2VFe3O8	1.33	K1.33	K1.33Li2VFe3O8
Li2VGa3O8	2.03	K2.03	K2.03Li2VGa3O8
Li2VO3F	0.8	K0.8	K0.8Li2VO3F
Li2VO3F	0.8	K0.8	K0.8Li2VO3F
Li2VO3F	0.85	K0.85	K0.85Li2VO3F
Li2VOF5	0.95	K0.95	K0.95Li2VOF5
Li2VSi2O7	1.08	K1.08	K1.08Li2VSi2O7
Li2Zr7Fe(PO4)12	6.63	K6.63	K6.63Li2Zr7Fe(PO4)12
Li3(CoS2)4	1.32	K1.32	K1.32Li3(CoS2)4
Li3(CuO2)2	1.13	K1.13	K1.13Li3(CuO2)2
Li3(NiO2)4	1.22	K1.22	K1.22Li3(NiO2)4

Li3(NiO2)5	1.6	K1.6	K1.6Li3(NiO2)5
Li3Co2Cu3O10	1.92	K1.92	K1.92Li3Co2Cu3O10
Li3Co2Ni3O10	1.86	K1.86	K1.86Li3Co2Ni3O10
Li3Cr(PO4)2	1.13	K1.13	K1.13Li3Cr(PO4)2
Li3Cr2Fe3O10	1.98	K1.98	K1.98Li3Cr2Fe3O10
Li3Cr2Fe5O12	2.39	K2.39	K2.39Li3Cr2Fe5O12
Li3Cr2P2(CO7)2	1.98	K1.98	K1.98Li3Cr2P2(CO7)2
Li3Cr3CuO8	1.3	K1.3	K1.3Li3Cr3CuO8
Li3Cr3GaO8	1.48	K1.48	K1.48Li3Cr3GaO8
Li3Cr3NiO8	1.38	K1.38	K1.38Li3Cr3NiO8
Li3CrFe3O8	1.36	K1.36	K1.36Li3CrFe3O8
Li3CrNi3O8	1.41	K1.41	K1.41Li3CrNi3O8
Li3Cu(PO4)2	1.13	K1.13	K1.13Li3Cu(PO4)2
Li3Cu3TeO8	1.43	K1.43	K1.43Li3Cu3TeO8
Li3CuF6	0.85	K0.85	K0.85Li3CuF6
Li3CuNi3O8	1.22	K1.22	K1.22Li3CuNi3O8
Li3Fe(Ni2O5)2	1.73	K1.73	K1.73Li3Fe(Ni2O5)2
Li3Fe2(PO4)3	1.31	K1.31	K1.31Li3Fe2(PO4)3
Li3Fe2(SiO4)2	1.29	K1.29	K1.29Li3Fe2(SiO4)2
Li3Fe2Ni3O10	1.6	K1.6	K1.6Li3Fe2Ni3O10
Li3Fe2P2(CO7)2	1.98	K1.98	K1.98Li3Fe2P2(CO7)2
Li3Fe2P2(O4F)2	1.39	K1.39	K1.39Li3Fe2P2(O4F)2
Li3Fe3(BO3)4	1.4	K1.4	K1.4Li3Fe3(BO3)4
Li3Fe3(SnO5)2	2.19	K2.19	K2.19Li3Fe3(SnO5)2

Li3Fe3O8	1.57	K1.57	K1.57Li3Fe3O8
Li3Fe3SbO8	1.36	K1.36	K1.36Li3Fe3SbO8
Li3Fe3TeO8	1.32	K1.32	K1.32Li3Fe3TeO8
Li3Fe3WO8	1.24	K1.24	K1.24Li3Fe3WO8
Li3Fe4(P2O7)4	4.17	K4.17	K4.17Li3Fe4(P2O7)4
Li3Fe4(Si3O10)2	3.73	K3.73	K3.73Li3Fe4(Si3O10)2
Li3Fe5(CoO6)2	2.45	K2.45	K2.45Li3Fe5(CoO6)2
Li3Fe5(NiO6)2	2.44	K2.44	K2.44Li3Fe5(NiO6)2
Li3Fe5O12	2.14	K2.14	K2.14Li3Fe5O12
Li3Fe7O12	2.53	K2.53	K2.53Li3Fe7O12
Li3Fe8(BO3)8	2.72	K2.72	K2.72Li3Fe8(BO3)8
Li3FeOF4	1.03	K1.03	K1.03Li3FeOF4
Li3La5Ti6Nb2O26	3.28	K3.28	K3.28Li3La5Ti6Nb2O26
Li3Mn2(CO5)2	1.26	K1.26	K1.26Li3Mn2(CO5)2
Li3Mn2(SiO4)2	1.26	K1.26	K1.26Li3Mn2(SiO4)2
Li3Mn2Fe(BO3)4	1.65	K1.65	K1.65Li3Mn2Fe(BO3)4
Li3Mn2Ni5O12	2.54	K2.54	K2.54Li3Mn2Ni5O12
Li3Mn2P2(CO7)2	2.16	K2.16	K2.16Li3Mn2P2(CO7)2
Li3Mn2V5O12	2.22	K2.22	K2.22Li3Mn2V5O12
Li3Mn3(BO3)4	1.46	K1.46	K1.46Li3Mn3(BO3)4
Li3Mn3(FeO5)2	1.72	K1.72	K1.72Li3Mn3(FeO5)2
Li3Mn3(PO4)4	2.69	K2.69	K2.69Li3Mn3(PO4)4
Li3Mn3O5F3	1.66	K1.66	K1.66Li3Mn3O5F3
Li3Mn3O8	1.13	K1.13	K1.13Li3Mn3O8

Li3Mn3WO8	1.31	K1.31	K1.31Li3Mn3WO8
Li3Mn4(BO3)4	1.62	K1.62	K1.62Li3Mn4(BO3)4
Li3Mn4O8	1.32	K1.32	K1.32Li3Mn4O8
Li3Mn5(CoO6)2	1.84	K1.84	K1.84Li3Mn5(CoO6)2
Li3Mn7O16	3.28	K3.28	K3.28Li3Mn7O16
Li3MnCu3O8	1.14	K1.14	K1.14Li3MnCu3O8
Li3MnOF4	0.93	K0.93	K0.93Li3MnOF4
Li3MnP2O9	1.2	K1.2	K1.2Li3MnP2O9
Li3MnSi2O7	1.23	K1.23	K1.23Li3MnSi2O7
Li3MnV(PO4)3	1.3	K1.3	K1.3Li3MnV(PO4)3
Li3MnV3O8	1.54	K1.54	K1.54Li3MnV3O8
Li3Mo2P5O18	2.45	K2.45	K2.45Li3Mo2P5O18
Li3MoP2O9	1.26	K1.26	K1.26Li3MoP2O9
Li3Nb3P8O29	3.94	K3.94	K3.94Li3Nb3P8O29
Li3Nb3TeO12	2.22	K2.22	K2.22Li3Nb3TeO12
Li3NbFe3O8	1.38	K1.38	K1.38Li3NbFe3O8
Li3NbNi3O8	1.12	K1.12	K1.12Li3NbNi3O8
Li3NbV3O8	1.23	K1.23	K1.23Li3NbV3O8
Li3Ni2(CO3)4	1.34	K1.34	K1.34Li3Ni2(CO3)4
Li3Ni3SbO8	1.33	K1.33	K1.33Li3Ni3SbO8
Li3Sb2P5O18	3.27	K3.27	K3.27Li3Sb2P5O18
Li3Sb3P8O29	4.66	K4.66	K4.66Li3Sb3P8O29
Li3Si2(NiO4)2	1.28	K1.28	K1.28Li3Si2(NiO4)2
Li3Ti3CrO8	1.52	K1.52	K1.52Li3Ti3CrO8

Li3Ti4O8	1.14	K1.14	K1.14Li3Ti4O8
Li3TiFe3O8	1.41	K1.41	K1.41Li3TiFe3O8
Li3TiNi3O8	1.19	K1.19	K1.19Li3TiNi3O8
Li3V2(NiO4)2	1.38	K1.38	K1.38Li3V2(NiO4)2
Li3V2(O2F)2	1.19	K1.19	K1.19Li3V2(O2F)2
Li3V2F12	1.56	K1.56	K1.56Li3V2F12
Li3V2Fe3O10	1.76	K1.76	K1.76Li3V2Fe3O10
Li3V3(FeO5)2	1.81	K1.81	K1.81Li3V3(FeO5)2
Li3V3(FeO6)2	2.1	K2.1	K2.1Li3V3(FeO6)2
Li3V3CoO8	1.61	K1.61	K1.61Li3V3CoO8
Li3V3Cr2O10	1.93	K1.93	K1.93Li3V3Cr2O10
Li3V3FeO8	1.5	K1.5	K1.5Li3V3FeO8
Li3V3P8O29	4.26	K4.26	K4.26Li3V3P8O29
Li3V4(PO4)6	3.47	K3.47	K3.47Li3V4(PO4)6
Li3V7O12	1.78	K1.78	K1.78Li3V7O12
Li3VAs2O9	1.07	K1.07	K1.07Li3VAs2O9
Li3VFe3O8	1.49	K1.49	K1.49Li3VFe3O8
Li3VO3F2	0.95	K0.95	K0.95Li3VO3F2
Li3ZrNb(TeO6)2	2.13	K2.13	K2.13Li3ZrNb(TeO6)2
Li4(NiO2)11	4.55	K4.55	K4.55Li4(NiO2)11
Li4(NiO2)5	1.76	K1.76	K1.76Li4(NiO2)5
Li4Co13O28	5.34	K5.34	K5.34Li4Co13O28
Li4Co2C4SO16	1.83	K1.83	K1.83Li4Co2C4SO16
Li4Co2Ni3O10	1.39	K1.39	K1.39Li4Co2Ni3O10

Li4Co3(NiO4)3	1.79	K1.79	K1.79Li4Co3(NiO4)3
Li4Co3Ni5O16	3.57	K3.57	K3.57Li4Co3Ni5O16
Li4Co5Ni3O16	3.53	K3.53	K3.53Li4Co5Ni3O16
Li4Co5O12	1.89	K1.89	K1.89Li4Co5O12
Li4Co7O16	3.1	K3.1	K3.1Li4Co7O16
Li4CoCu3(PO4)4	2.85	K2.85	K2.85Li4CoCu3(PO4)4
Li4CoO4	0.83	K0.83	K0.83Li4CoO4
Li4CoO4	0.91	K0.91	K0.91Li4CoO4
Li4Cr2C4SO16	1.83	K1.83	K1.83Li4Cr2C4SO16
Li4Cr2Fe3Co3O16	3.59	K3.59	K3.59Li4Cr2Fe3Co3O16
Li4Cr2Ni5O12	1.81	K1.81	K1.81Li4Cr2Ni5O12
Li4Cr3(FeO4)3	2.35	K2.35	K2.35Li4Cr3(FeO4)3
Li4Fe2C4SO16	1.93	K1.93	K1.93Li4Fe2C4SO16
Li4Fe2Co3Ni3O16	3.46	K3.46	K3.46Li4Fe2Co3Ni3O16
Li4Fe2Ni5O12	1.66	K1.66	K1.66Li4Fe2Ni5O12
Li4Fe3(NiO4)3	1.79	K1.79	K1.79Li4Fe3(NiO4)3
Li4Fe3(NiO5)2	1.23	K1.23	K1.23Li4Fe3(NiO5)2
Li4Fe3Co2Ni3O16	3.35	K3.35	K3.35Li4Fe3Co2Ni3O16
Li4Fe3Co3(NiO8)2	3.37	K3.37	K3.37Li4Fe3Co3(NiO8)2
Li4Fe5NiO12	1.59	K1.59	K1.59Li4Fe5NiO12
Li4Fe9CoO20	4.76	K4.76	K4.76Li4Fe9CoO20
Li4FeCo3O8	2	K2	K2Li4FeCo3O8
Li4FeOF5	1.19	K1.19	K1.19Li4FeOF5
Li4Mn(Ni2O5)2	1.29	K1.29	K1.29Li4Mn(Ni2O5)2

Li4Mn2Co3O10	1.26	K1.26	K1.26Li4Mn2Co3O10
Li4Mn2Fe3Ni3O16	3.1	K3.1	K3.1Li4Mn2Fe3Ni3O16
Li4Mn2Ni3O10	1.32	K1.32	K1.32Li4Mn2Ni3O10
Li4Mn2V3Cr3O16	3.3	K3.3	K3.3Li4Mn2V3Cr3O16
Li4Mn3(NiO4)3	1.7	K1.7	K1.7Li4Mn3(NiO4)3
Li4Mn3(SnO5)2	1.33	K1.33	K1.33Li4Mn3(SnO5)2
Li4Mn3Co2Ni3O16	2.77	K2.77	K2.77Li4Mn3Co2Ni3O16
Li4Mn3Cr2Fe3O16	3.14	K3.14	K3.14Li4Mn3Cr2Fe3O16
Li4Mn3Cr2O10	1.83	K1.83	K1.83Li4Mn3Cr2O10
Li4Mn3Cr3(FeO8)2	2.72	K2.72	K2.72Li4Mn3Cr3(FeO8)2
Li4Mn3Cr3(NiO8)2	2.99	K2.99	K2.99Li4Mn3Cr3(NiO8)2
Li4Mn3V5O16	2.97	K2.97	K2.97Li4Mn3V5O16
Li4Mn5(NiO6)2	1.47	K1.47	K1.47Li4Mn5(NiO6)2
Li4Mn5Ni3O16	3.17	K3.17	K3.17Li4Mn5Ni3O16
Li4Mn5O10	1.57	K1.57	K1.57Li4Mn5O10
Li4Mn5SbO12	1.56	K1.56	K1.56Li4Mn5SbO12
Li4Mn7O16	2.76	K2.76	K2.76Li4Mn7O16
Li4NbFe5O12	1.75	K1.75	K1.75Li4NbFe5O12
Li4Ni3(SnO5)2	1.35	K1.35	K1.35Li4Ni3(SnO5)2
Li4Ti11O24	3.25	K3.25	K3.25Li4Ti11O24
Li4Ti15O32	2.2	K2.2	K2.2Li4Ti15O32
Li4Ti2Fe3Co3O16	3.14	K3.14	K3.14Li4Ti2Fe3Co3O16
Li4Ti2Fe3Ni3O16	3.03	K3.03	K3.03Li4Ti2Fe3Ni3O16
Li4Ti2Fe5O12	1.58	K1.58	K1.58Li4Ti2Fe5O12

Li4Ti2Mn3Ni3O16	2.39	K2.39	K2.39Li4Ti2Mn3Ni3O16
Li4Ti2Ni3O10	1.2	K1.2	K1.2Li4Ti2Ni3O10
Li4Ti2V5O12	1.27	K1.27	K1.27Li4Ti2V5O12
Li4Ti3(CoO4)3	1.55	K1.55	K1.55Li4Ti3(CoO4)3
Li4Ti3(FeO4)3	1.66	K1.66	K1.66Li4Ti3(FeO4)3
Li4Ti3Co3(NiO8)2	2.85	K2.85	K2.85Li4Ti3Co3(NiO8)2
Li4Ti3O8	1.28	K1.28	K1.28Li4Ti3O8
Li4Ti9O20	2.63	K2.63	K2.63Li4Ti9O20
Li4TiFe5O12	1.65	K1.65	K1.65Li4TiFe5O12
Li4V(CO3)4	1.17	K1.17	K1.17Li4V(CO3)4
Li4V11O22	3.37	K3.37	K3.37Li4V11O22
Li4V2C4SO16	1.55	K1.55	K1.55Li4V2C4SO16
Li4V2Fe5O12	1.35	K1.35	K1.35Li4V2Fe5O12
Li4V3Cr3O12	2.19	K2.19	K2.19Li4V3Cr3O12
Li4V3Cr5O16	3.66	K3.66	K3.66Li4V3Cr5O16
Li4V5(FeO6)2	1.64	K1.64	K1.64Li4V5(FeO6)2
Li4V5Cr3O16	3.32	K3.32	K3.32Li4V5Cr3O16
Li4V5O9F	1.24	K1.24	K1.24Li4V5O9F
Li4VO4F	1.03	K1.03	K1.03Li4VO4F
Li4VP2(O4F)2	1.28	K1.28	K1.28Li4VP2(O4F)2
Li5(CoO3)2	1.53	K1.53	K1.53Li5(CoO3)2
Li5Co4(Si3O10)2	3.26	K3.26	K3.26Li5Co4(Si3O10)2
Li5CoNi9O20	3.86	K3.86	K3.86Li5CoNi9O20
Li5Cr5O12	1.89	K1.89	K1.89Li5Cr5O12

Li5Fe2P2(CO7)2	1.63	K1.63	K1.63Li5Fe2P2(CO7)2
Li5Fe5O12	2.15	K2.15	K2.15Li5Fe5O12
Li5FeS4	1	K1	K1Li5FeS4
Li5La3(SbO6)2	1.99	K1.99	K1.99Li5La3(SbO6)2
Li5La3Nb2O12	2.09	K2.09	K2.09Li5La3Nb2O12
Li5La4TiNb7O28	3	K3	K3Li5La4TiNb7O28
Li5Mn2P2(CO7)2	1.53	K1.53	K1.53Li5Mn2P2(CO7)2
Li5Mn5O12	1.98	K1.98	K1.98Li5Mn5O12
Li5Mn6O16	2.58	K2.58	K2.58Li5Mn6O16
Li5Mn8(BO3)8	2.75	K2.75	K2.75Li5Mn8(BO3)8
Li5MnO4	0.87	K0.87	K0.87Li5MnO4
Li5Ni9O16	3.6	K3.6	K3.6Li5Ni9O16
Li5NiO4	0.79	K0.79	K0.79Li5NiO4
Li5V2OF11	1.05	K1.05	K1.05Li5V2OF11
Li5VF8	1.14	K1.14	K1.14Li5VF8
Li6(CoO2)5	2.8	K2.8	K2.8Li6(CoO2)5
Li6CrFe3(PO4)6	3.16	K3.16	K3.16Li6CrFe3(PO4)6
Li6CrO6	1.07	K1.07	K1.07Li6CrO6
Li6CuO4	0.84	K0.84	K0.84Li6CuO4
Li6Fe3Co(PO4)6	3.09	K3.09	K3.09Li6Fe3Co(PO4)6
Li6Fe3Sn(PO4)6	2.37	K2.37	K2.37Li6Fe3Sn(PO4)6
Li6FeCo3(PO4)6	3.13	K3.13	K3.13Li6FeCo3(PO4)6
Li6FeNi9O20	3.27	K3.27	K3.27Li6FeNi9O20
Li6FeO5F	1.31	K1.31	K1.31Li6FeO5F

Li6FeO6	1.28	K1.28	K1.28Li6FeO6
Li6Mg(Ni6O13)2	4	K4	K4Li6Mg(Ni6O13)2
Li6Mn17O40	6.16	K6.16	K6.16Li6Mn17O40
Li6MnCo3(PO4)6	3.21	K3.21	K3.21Li6MnCo3(PO4)6
Li6MnNi7O16	2.34	K2.34	K2.34Li6MnNi7O16
Li6NbNi3(PO4)6	1.93	K1.93	K1.93Li6NbNi3(PO4)6
Li6Sn3P8O29	3.45	K3.45	K3.45Li6Sn3P8O29
Li6TiNi7O16	3.09	K3.09	K3.09Li6TiNi7O16
Li6VO5F	1.26	K1.26	K1.26Li6VO5F
Li7(CoO3)2	1.34	K1.34	K1.34Li7(CoO3)2
Li7(SnO3)4	2.37	K2.37	K2.37Li7(SnO3)4
Li7BiO6	1.03	K1.03	K1.03Li7BiO6
Li7Fe5O16	2.84	K2.84	K2.84Li7Fe5O16
Li7Mn(O2F)2	1.02	K1.02	K1.02Li7Mn(O2F)2
Li7NbO6	0.92	K0.92	K0.92Li7NbO6
Li7Ni(O2F)2	1	K1	K1Li7Ni(O2F)2
Li7Ni13O24	4.31	K4.31	K4.31Li7Ni13O24
Li7Ti12NbO30	0.83	K0.83	K0.83Li7Ti12NbO30
Li7Ti7Nb5O30	3.41	K3.41	K3.41Li7Ti7Nb5O30
Li7V16(PO4)24	5.74	K5.74	K5.74Li7V16(PO4)24
Li7VO5F	1.14	K1.14	K1.14Li7VO5F
Li8(CoO2)5	3.1	K3.1	K3.1Li8(CoO2)5
Li8(FeO2)5	2.9	K2.9	K2.9Li8(FeO2)5
Li8CoNi9O20	2.76	K2.76	K2.76Li8CoNi9O20

Li8Fe3Ni7O20	2.74	K2.74	K2.74Li8Fe3Ni7O20
Li8TiMn3(PO4)6	2.44	K2.44	K2.44Li8TiMn3(PO4)6
Li9(FeO4)2	1.66	K1.66	K1.66Li9(FeO4)2
Li9(NiO4)2	1.25	K1.25	K1.25Li9(NiO4)2
Li9Cr4(BO3)8	1.63	K1.63	K1.63Li9Cr4(BO3)8
Li9Cu2(HO2)4	1.16	K1.16	K1.16Li9Cu2(HO2)4
Li9Fe4(BO3)8	1.66	K1.66	K1.66Li9Fe4(BO3)8
Li9La12(SnO6)8	4.72	K4.72	K4.72Li9La12(SnO6)8
Li9Ni15O28	3.81	K3.81	K3.81Li9Ni15O28
LiAl2FeO6	1.5	K1.5	K1.5LiAl2FeO6
LiAlVO4	0.92	K0.92	K0.92LiAlVO4
LiCa2Nb3O10	1.87	K1.87	K1.87LiCa2Nb3O10
LiCdSb	0.96	K0.96	K0.96LiCdSb
LiCeSn	0.91	K0.91	K0.91LiCeSn
LiCo(CO3)2	1.02	K1.02	K1.02LiCo(CO3)2
LiCo(SiO3)2	1.34	K1.34	K1.34LiCo(SiO3)2
LiCo2(BO3)2	1.23	K1.23	K1.23LiCo2(BO3)2
LiCo2CuO6	1.5	K1.5	K1.5LiCo2CuO6
LiCo3(SiO4)2	1.69	K1.69	K1.69LiCo3(SiO4)2
LiCo3CuO8	2.03	K2.03	K2.03LiCo3CuO8
LiCoCO4	0.83	K0.83	K0.83LiCoCO4
LiCoCuO4	1	K1	K1LiCoCuO4
LiCoGeO4	1.16	K1.16	K1.16LiCoGeO4
LiCoH8(CO5)2	1.36	K1.36	K1.36LiCoH8(CO5)2

LiCoH8(SO6)2	1.64	K1.64	K1.64LiCoH8(SO6)2
LiCoNiO4	0.98	K0.98	K0.98LiCoNiO4
LiCoP2O7	1.3	K1.3	K1.3LiCoP2O7
LiCoPO4F	0.9	K0.9	K0.9LiCoPO4F
LiCoSiO4	0.96	K0.96	K0.96LiCoSiO4
LiCoSnO4	1.22	K1.22	K1.22LiCoSnO4
LiCr(Si2O5)2	1.59	K1.59	K1.59LiCr(Si2O5)2
LiCr(Si2O5)3	2.07	K2.07	K2.07LiCr(Si2O5)3
LiCr2(CO3)4	1.94	K1.94	K1.94LiCr2(CO3)4
LiCr2(PO4)2	1.46	K1.46	K1.46LiCr2(PO4)2
LiCr2(PO4)2	1.53	K1.53	K1.53LiCr2(PO4)2
LiCr2CoO6	1.75	K1.75	K1.75LiCr2CoO6
LiCr2O4	1.09	K1.09	K1.09LiCr2O4
LiCrAsCO7	1.49	K1.49	K1.49LiCrAsCO7
LiCrCoO4	1.16	K1.16	K1.16LiCrCoO4
LiCrCSO7	1.34	K1.34	K1.34LiCrCSO7
LiCrFeO4	1.14	K1.14	K1.14LiCrFeO4
LiCrNiO4	1.07	K1.07	K1.07LiCrNiO4
LiCrP2O7	1.26	K1.26	K1.26LiCrP2O7
LiCrPO4F	0.93	K0.93	K0.93LiCrPO4F
LiCu(HO)4	0.84	K0.84	K0.84LiCu(HO)4
LiCu(PO3)4	1.74	K1.74	K1.74LiCu(PO3)4
LiCu2(CO3)2	1.26	K1.26	K1.26LiCu2(CO3)2
LiCu2C2O7	1.29	K1.29	K1.29LiCu2C2O7

LiCu2F6	1.12	K1.12	K1.12LiCu2F6
LiCu2P5O16	2.81	K2.81	K2.81LiCu2P5O16
LiCu3(CO3)3	1.55	K1.55	K1.55LiCu3(CO3)3
LiCu5F12	1.77	K1.77	K1.77LiCu5F12
LiCuBO3	0.64	K0.64	K0.64LiCuBO3
LiCuF4	0.88	K0.88	K0.88LiCuF4
LiCuO2	0.53	K0.53	K0.53LiCuO2
LiCuP2O7	1.22	K1.22	K1.22LiCuP2O7
LiCuPCO7	1.3	K1.3	K1.3LiCuPCO7
LiCuPO4	1.01	K1.01	K1.01LiCuPO4
LiFe(SiO3)2	1.38	K1.38	K1.38LiFe(SiO3)2
LiFe(SO4)2	1.4	K1.4	K1.4LiFe(SO4)2
LiFe2(CO3)3	1.54	K1.54	K1.54LiFe2(CO3)3
LiFe2(CO3)4	1.88	K1.88	K1.88LiFe2(CO3)4
LiFe2(CoO4)2	2.34	K2.34	K2.34LiFe2(CoO4)2
LiFe2(PO4)2	1.61	K1.61	K1.61LiFe2(PO4)2
LiFe2(PO4)3	2.13	K2.13	K2.13LiFe2(PO4)3
LiFe2C2O7	1.17	K1.17	K1.17LiFe2C2O7
LiFe2Si2O7	1.41	K1.41	K1.41LiFe2Si2O7
LiFe3(OF3)2	2.24	K2.24	K2.24LiFe3(OF3)2
LiFe4(BO3)4	1.32	K1.32	K1.32LiFe4(BO3)4
LiFe8(BO3)8	3.07	K3.07	K3.07LiFe8(BO3)8
LiFeAsCO7	1.67	K1.67	K1.67LiFeAsCO7
LiFeCO4	0.87	K0.87	K0.87LiFeCO4

LiFeCuO4	0.91	K0.91	K0.91LiFeCuO4
LiFeF4	0.89	K0.89	K0.89LiFeF4
LiFeH8(SO6)2	1.53	K1.53	K1.53LiFeH8(SO6)2
LiFeNiO4	0.93	K0.93	K0.93LiFeNiO4
LiFeO3	0.69	K0.69	K0.69LiFeO3
LiFeP2O7	1.16	K1.16	K1.16LiFeP2O7
LiFePCO7	1.56	K1.56	K1.56LiFePCO7
LiFeS2	0.84	K0.84	K0.84LiFeS2
LiFeSiO4	0.85	K0.85	K0.85LiFeSiO4
LiFeSnO4	1.17	K1.17	K1.17LiFeSnO4
LiLa2Nb8O24	3.03	K3.03	K3.03LiLa2Nb8O24
LiLa5Ti8O24	2.91	K2.91	K2.91LiLa5Ti8O24
LiLa7(CuO7)2	3.01	K3.01	K3.01LiLa7(CuO7)2
LiLaNb4O12	2.89	K2.89	K2.89LiLaNb4O12
LiMn(PO4)2	1.41	K1.41	K1.41LiMn(PO4)2
LiMn(SO4)2	1.34	K1.34	K1.34LiMn(SO4)2
LiMn2(BO3)2	1.28	K1.28	K1.28LiMn2(BO3)2
LiMn2(CO3)4	2.17	K2.17	K2.17LiMn2(CO3)4
LiMn2(CO4)2	1.33	K1.33	K1.33LiMn2(CO4)2
LiMn2(P2O7)2	1.94	K1.94	K1.94LiMn2(P2O7)2
LiMn2(PO4)2	1.32	K1.32	K1.32LiMn2(PO4)2
LiMn2(PO4)3	2.12	K2.12	K2.12LiMn2(PO4)3
LiMn2(PO5)2	1.56	K1.56	K1.56LiMn2(PO5)2
LiMn2Cr2O8	1.92	K1.92	K1.92LiMn2Cr2O8

LiMn2NiO6	1.67	K1.67	K1.67LiMn2NiO6
LiMn3(BO3)3	1.38	K1.38	K1.38LiMn3(BO3)3
LiMn3(OF3)2	2.21	K2.21	K2.21LiMn3(OF3)2
LiMn3(PO4)3	1.82	K1.82	K1.82LiMn3(PO4)3
LiMn3(PO4)4	3.16	K3.16	K3.16LiMn3(PO4)4
LiMn3O6	1.44	K1.44	K1.44LiMn3O6
LiMn3OF8	1.97	K1.97	K1.97LiMn3OF8
LiMn4(BO3)4	1.73	K1.73	K1.73LiMn4(BO3)4
LiMn5(CuO6)2	3.35	K3.35	K3.35LiMn5(CuO6)2
LiMn5O10	2.67	K2.67	K2.67LiMn5O10
LiMn7O12	3.7	K3.7	K3.7LiMn7O12
LiMnAsCO7	1.76	K1.76	K1.76LiMnAsCO7
LiMnCr2O6	1.92	K1.92	K1.92LiMnCr2O6
LiMnF4	0.84	K0.84	K0.84LiMnF4
LiMnFeO4	1.11	K1.11	K1.11LiMnFeO4
LiMnH4(SO5)2	1.61	K1.61	K1.61LiMnH4(SO5)2
LiMnNbO4	0.97	K0.97	K0.97LiMnNbO4
LiMnNiO4	1.01	K1.01	K1.01LiMnNiO4
LiMnP2O7	1.34	K1.34	K1.34LiMnP2O7
LiMnPCO7	1.58	K1.58	K1.58LiMnPCO7
LiMnSnO4	1.24	K1.24	K1.24LiMnSnO4
LiMnV(PO4)3	1.73	K1.73	K1.73LiMnV(PO4)3
LiMnVO4	1.1	K1.1	K1.1LiMnVO4
LiMo(PO4)2	1.33	K1.33	K1.33LiMo(PO4)2

LiNb(PO4)2	1.41	K1.41	K1.41LiNb(PO4)2
LiNb(TeO4)3	3.12	K3.12	K3.12LiNb(TeO4)3
LiNb7V12O48	4.99	K4.99	K4.99LiNb7V12O48
LiNbF6	1.57	K1.57	K1.57LiNbF6
LiNbP4O13	1.88	K1.88	K1.88LiNbP4O13
LiNbTe2WO12	2.84	K2.84	K2.84LiNbTe2WO12
LiNbVO4	0.93	K0.93	K0.93LiNbVO4
LiNi(CO3)2	0.84	K0.84	K0.84LiNi(CO3)2
LiNiCSO7	1.36	K1.36	K1.36LiNiCSO7
LiNiP2O7	1.3	K1.3	K1.3LiNiP2O7
LiNiSnO4	1.19	K1.19	K1.19LiNiSnO4
LiP2WO8	1.67	K1.67	K1.67LiP2WO8
LiReO3	0.79	K0.79	K0.79LiReO3
LiSb(PO4)2	2.04	K2.04	K2.04LiSb(PO4)2
LiSb(TeO4)3	3.93	K3.93	K3.93LiSb(TeO4)3
LiSb2(PO4)3	2.47	K2.47	K2.47LiSb2(PO4)3
LiSbAu	0.78	K0.78	K0.78LiSbAu
LiSbTe2WO12	3.09	K3.09	K3.09LiSbTe2WO12
LiSn(PO3)4	1.93	K1.93	K1.93LiSn(PO3)4
LiSn2(PO4)3	2.29	K2.29	K2.29LiSn2(PO4)3
LiSn2P4H3O16	3.12	K3.12	K3.12LiSn2P4H3O16
LiSn2P5O16	3.39	K3.39	K3.39LiSn2P5O16
LiSnP2O7	1.53	K1.53	K1.53LiSnP2O7
LiTi(PO3)5	2.26	K2.26	K2.26LiTi(PO3)5

LiTi2(PO4)3	1.29	K1.29	K1.29LiTi2(PO4)3
LiTi2Co3O10	2.97	K2.97	K2.97LiTi2Co3O10
LiTi2Mn3O10	2.87	K2.87	K2.87LiTi2Mn3O10
LiTi2O4	0.75	K0.75	K0.75LiTi2O4
LiTi2V3O10	2.7	K2.7	K2.7LiTi2V3O10
LiTi2V3O12	2.34	K2.34	K2.34LiTi2V3O12
LiTi2VO6	1.63	K1.63	K1.63LiTi2VO6
LiTi3V(PO4)6	3.83	K3.83	K3.83LiTi3V(PO4)6
LiTi3VO8	1.74	K1.74	K1.74LiTi3VO8
LiTiCoO4	1.08	K1.08	K1.08LiTiCoO4
LiTiCrO4	1.05	K1.05	K1.05LiTiCrO4
LiTiFe2O5	1.28	K1.28	K1.28LiTiFe2O5
LiTiFeO4	1.03	K1.03	K1.03LiTiFeO4
LiTiMnO4	0.96	K0.96	K0.96LiTiMnO4
LiTiNiO4	0.87	K0.87	K0.87LiTiNiO4
LiTiPCO7	1.27	K1.27	K1.27LiTiPCO7
LiTiV2O6	1.62	K1.62	K1.62LiTiV2O6
LiTiV3O10	2.33	K2.33	K2.33LiTiV3O10
LiTiV3O8	2.06	K2.06	K2.06LiTiV3O8
LiTiVO4	0.79	K0.79	K0.79LiTiVO4
LiTiVO4	0.86	K0.86	K0.86LiTiVO4
LiTiVO5	1.21	K1.21	K1.21LiTiVO5
LiV(CO3)2	0.91	K0.91	K0.91LiV(CO3)2
LiV(OF)2	0.69	K0.69	K0.69LiV(OF)2

LiV(PO3)4	1.77	K1.77	K1.77LiV(PO3)4
LiV(PO4)2	1.2	K1.2	K1.2LiV(PO4)2
LiV(Si2O5)3	2.13	K2.13	K2.13LiV(Si2O5)3
LiV(TeO4)3	3.13	K3.13	K3.13LiV(TeO4)3
LiV2(CO3)4	1.85	K1.85	K1.85LiV2(CO3)4
LiV2(CO4)2	1.28	K1.28	K1.28LiV2(CO4)2
LiV2(SiO4)2	1.58	K1.58	K1.58LiV2(SiO4)2
LiV2CrO6	1.6	K1.6	K1.6LiV2CrO6
LiV2F7	1.4	K1.4	K1.4LiV2F7
LiV2O4	1.01	K1.01	K1.01LiV2O4
LiV2P4(HO8)2	2.19	K2.19	K2.19LiV2P4(HO8)2
LiV3CoO10	2.36	K2.36	K2.36LiV3CoO10
LiV3CrO8	2.09	K2.09	K2.09LiV3CrO8
LiV3O8	1.84	K1.84	K1.84LiV3O8
LiV3OF11	2.62	K2.62	K2.62LiV3OF11
LiV4CuO12	2.39	K2.39	K2.39LiV4CuO12
LiV5O10	2.46	K2.46	K2.46LiV5O10
LiVAsCO7	1.3	K1.3	K1.3LiVAsCO7
LiVCoO4	0.99	K0.99	K0.99LiVCoO4
LiVCrO4	1.13	K1.13	K1.13LiVCrO4
LiVF4	0.97	K0.97	K0.97LiVF4
LiVF6	1.09	K1.09	K1.09LiVF6
LiVFeO4	1.05	K1.05	K1.05LiVFeO4
LiVO3	0.84	K0.84	K0.84LiVO3

LiVOF4	0.88	K0.88	K0.88LiVOF4
LiVPCO7	1.08	K1.08	K1.08LiVPCO7
LiVPO4F	0.86	K0.86	K0.86LiVPO4F
LiVSi4(HO6)2	1.74	K1.74	K1.74LiVSi4(HO6)2
LiVSiCO7	1.31	K1.31	K1.31LiVSiCO7
LiVSiO5	0.84	K0.84	K0.84LiVSiO5
LiVTe(WO6)2	2.69	K2.69	K2.69LiVTe(WO6)2
Lu(NbCl3)6	3.19	K3.19	K3.19Lu(NbCl3)6
Mg(Fe5O8)2	3	K3	K3Mg(Fe5O8)2
Mg(NiO2)4	1.83	K1.83	K1.83Mg(NiO2)4
Mg2Mn3O8	1.72	K1.72	K1.72Mg2Mn3O8
Mg2Ni	0.7	K0.7	K0.7Mg2Ni
Mg3Cu9(SiO3)16	3.27	K3.27	K3.27Mg3Cu9(SiO3)16
MgCr3(SO4)6	3.51	K3.51	K3.51MgCr3(SO4)6
MgCr3Se2(SO6)4	4.59	K4.59	K4.59MgCr3Se2(SO6)4
MgCr3Se3(SO8)3	4.18	K4.18	K4.18MgCr3Se3(SO8)3
MgCu2(SiO3)4	2.13	K2.13	K2.13MgCu2(SiO3)4
MgSbPd	0.94	K0.94	K0.94MgSbPd
MgSbPt	0.88	K0.88	K0.88MgSbPt
MgSn	0.63	K0.63	K0.63MgSn
MgSnAu	0.88	K0.88	K0.88MgSnAu
Mn(CO3)2	1.16	K1.16	K1.16Mn(CO3)2
Mn(CoO2)4	2.96	K2.96	K2.96Mn(CoO2)4
Mn(CoO3)2	1.78	K1.78	K1.78Mn(CoO3)2

Mn(GeO3)2	1.71	K1.71	K1.71Mn(GeO3)2
Mn(PO3)3	2.2	K2.2	K2.2Mn(PO3)3
Mn(PO3)4	2.1	K2.1	K2.1Mn(PO3)4
Mn(SbO3)4	4.03	K4.03	K4.03Mn(SbO3)4
Mn(SiO3)2	1.65	K1.65	K1.65Mn(SiO3)2
Mn13Cr3O32	4.12	K4.12	K4.12Mn13Cr3O32
Mn13Fe3O32	3.65	K3.65	K3.65Mn13Fe3O32
Mn15NiO32	3.33	K3.33	K3.33Mn15NiO32
Mn15O32	5.4	K5.4	K5.4Mn15O32
Mn2(SO4)3	2.03	K2.03	K2.03Mn2(SO4)3
Mn21O40	4.44	K4.44	K4.44Mn21O40
Mn2Co(PO4)3	2.2	K2.2	K2.2Mn2Co(PO4)3
Mn2Co3Te3O16	5.19	K5.19	K5.19Mn2Co3Te3O16
Mn2Co5O12	3.66	K3.66	K3.66Mn2Co5O12
Mn2CoO6	2.56	K2.56	K2.56Mn2CoO6
Mn2Cr3O12	1.8	K1.8	K1.8Mn2Cr3O12
Mn2Cr3Sb3O16	5.36	K5.36	K5.36Mn2Cr3Sb3O16
Mn2CrO6	1.57	K1.57	K1.57Mn2CrO6
Mn2Fe(PO4)3	2.08	K2.08	K2.08Mn2Fe(PO4)3
Mn2Fe3Co3O16	5.77	K5.77	K5.77Mn2Fe3Co3O16
Mn2Fe3P6WO24	3.29	K3.29	K3.29Mn2Fe3P6WO24
Mn2Fe3Sb(PO4)6	3.82	K3.82	K3.82Mn2Fe3Sb(PO4)6
Mn2Fe3Sn(PO4)6	3.86	K3.86	K3.86Mn2Fe3Sn(PO4)6
Mn2FeO6	2.47	K2.47	K2.47Mn2FeO6

Mn2NbNi3(PO4)6	4.15	K4.15	K4.15Mn2NbNi3(PO4)6
Mn2Ni(PO4)3	2.35	K2.35	K2.35Mn2Ni(PO4)3
Mn2O2F3	0.98	K0.98	K0.98Mn2O2F3
Mn2O3F	0.98	K0.98	K0.98Mn2O3F
Mn2OF3	0.86	K0.86	K0.86Mn2OF3
Mn2P2O7F2	2	K2	K2Mn2P2O7F2
Mn2P2O9	1.85	K1.85	K1.85Mn2P2O9
Mn2PO5	1.32	K1.32	K1.32Mn2PO5
Mn2Si2O7	2.05	K2.05	K2.05Mn2Si2O7
Mn3(P2O7)2	2.94	K2.94	K2.94Mn3(P2O7)2
Mn3(PO4)4	2.75	K2.75	K2.75Mn3(PO4)4
Mn3(SeO3)4	3.07	K3.07	K3.07Mn3(SeO3)4
Mn3Co2Te3O16	6	K6	K6Mn3Co2Te3O16
Mn3Co3(SbO8)2	5.04	K5.04	K5.04Mn3Co3(SbO8)2
Mn3Co3(SnO8)2	6.41	K6.41	K6.41Mn3Co3(SnO8)2
Mn3Co3(TeO8)2	5.15	K5.15	K5.15Mn3Co3(TeO8)2
Mn3CoO8	2.88	K2.88	K2.88Mn3CoO8
Mn3Cr(PO4)4	3.91	K3.91	K3.91Mn3Cr(PO4)4
Mn3Cr2Sb3O16	4.89	K4.89	K4.89Mn3Cr2Sb3O16
Mn3Cr2Sn(PO4)6	4.08	K4.08	K4.08Mn3Cr2Sn(PO4)6
Mn3Cr3(CoO8)2	4.39	K4.39	K4.39Mn3Cr3(CoO8)2
Mn3Cr3(SnO8)2	5.77	K5.77	K5.77Mn3Cr3(SnO8)2
Mn3Cr3(TeO8)2	5.54	K5.54	K5.54Mn3Cr3(TeO8)2
Mn3Cr3(WO8)2	3.73	K3.73	K3.73Mn3Cr3(WO8)2

Mn3Cr5O16	4.08	K4.08	K4.08Mn3Cr5O16
Mn3CrCo2(PO4)6	3.95	K3.95	K3.95Mn3CrCo2(PO4)6
Mn3CrO8	2.41	K2.41	K2.41Mn3CrO8
Mn3Cu(PO4)4	3.85	K3.85	K3.85Mn3Cu(PO4)4
Mn3CuNi2(PO4)6	4.43	K4.43	K4.43Mn3CuNi2(PO4)6
Mn3CuO8	2.68	K2.68	K2.68Mn3CuO8
Mn3Fe(PO4)4	2.23	K2.23	K2.23Mn3Fe(PO4)4
Mn3Fe2Co3O16	5.39	K5.39	K5.39Mn3Fe2Co3O16
Mn3Fe2Sb3O16	5.95	K5.95	K5.95Mn3Fe2Sb3O16
Mn3Fe2Sn(PO4)6	3.94	K3.94	K3.94Mn3Fe2Sn(PO4)6
Mn3Fe3(SbO8)2	6	K6	K6Mn3Fe3(SbO8)2
Mn3Fe3(TeO8)2	5.09	K5.09	K5.09Mn3Fe3(TeO8)2
Mn3FeO8	2.87	K2.87	K2.87Mn3FeO8
Mn3Nb(PO4)4	3.25	K3.25	K3.25Mn3Nb(PO4)4
Mn3Nb2Co3O16	5.03	K5.03	K5.03Mn3Nb2Co3O16
Mn3Nb2Cr3O16	4.57	K4.57	K4.57Mn3Nb2Cr3O16
Mn3NbCr2(PO4)6	4.16	K4.16	K4.16Mn3NbCr2(PO4)6
Mn3NbFe2(PO4)6	3.84	K3.84	K3.84Mn3NbFe2(PO4)6
Mn3NbO8	2.1	K2.1	K2.1Mn3NbO8
Mn3Ni(PO4)4	4.08	K4.08	K4.08Mn3Ni(PO4)4
Mn3Ni3(TeO8)2	4.84	K4.84	K4.84Mn3Ni3(TeO8)2
Mn3NiO8	3.1	K3.1	K3.1Mn3NiO8
Mn3OF6	1.42	K1.42	K1.42Mn3OF6
Mn3P3O13	2.85	K2.85	K2.85Mn3P3O13

Mn3P6WO24	2.87	K2.87	K2.87Mn3P6WO24
Mn3Sb(PO4)4	4.54	K4.54	K4.54Mn3Sb(PO4)4
Mn3Sb(PO4)6	3.6	K3.6	K3.6Mn3Sb(PO4)6
Mn3SbO8	3.05	K3.05	K3.05Mn3SbO8
Mn3Si3O10	2.59	K2.59	K2.59Mn3Si3O10
Mn3Sn(PO4)4	3.44	K3.44	K3.44Mn3Sn(PO4)4
Mn3Sn3(TeO8)2	6.38	K6.38	K6.38Mn3Sn3(TeO8)2
Mn3TeO8	2.54	K2.54	K2.54Mn3TeO8
Mn3V(PO4)4	4.16	K4.16	K4.16Mn3V(PO4)4
Mn3V2Co3O16	5.45	K5.45	K5.45Mn3V2Co3O16
Mn3V2Cr3O16	4.21	K4.21	K4.21Mn3V2Cr3O16
Mn3V2O10	2.52	K2.52	K2.52Mn3V2O10
Mn3V3(TeO8)2	6.27	K6.27	K6.27Mn3V3(TeO8)2
Mn3VO8	2.07	K2.07	K2.07Mn3VO8
Mn4(P2O7)3	1.7	K1.7	K1.7Mn4(P2O7)3
Mn4(PO4)3	1.94	K1.94	K1.94Mn4(PO4)3
Mn4CoO8	3.02	K3.02	K3.02Mn4CoO8
Mn4CrO8	2.45	K2.45	K2.45Mn4CrO8
Mn4FeO8	2.96	K2.96	K2.96Mn4FeO8
Mn4NiO8	3.1	K3.1	K3.1Mn4NiO8
Mn4OF8	1.5	K1.5	K1.5Mn4OF8
Mn4P7O24	2.53	K2.53	K2.53Mn4P7O24
Mn4Si4O13	3	K3	K3Mn4Si4O13
Mn5(P3O11)2	3.62	K3.62	K3.62Mn5(P3O11)2

Mn5(SeO3)8	4.91	K4.91	K4.91Mn5(SeO3)8
Mn5(Si2O7)2	3.27	K3.27	K3.27Mn5(Si2O7)2
Mn5Co(PO4)6	3.99	K3.99	K3.99Mn5Co(PO4)6
Mn5Co3O16	4.86	K4.86	K4.86Mn5Co3O16
Mn5CoO12	4.21	K4.21	K4.21Mn5CoO12
Mn5Cr(PO4)6	4	K4	K4Mn5Cr(PO4)6
Mn5Cr2O12	3.57	K3.57	K3.57Mn5Cr2O12
Mn5Cr3O16	3.96	K3.96	K3.96Mn5Cr3O16
Mn5Cu(PO4)6	4.19	K4.19	K4.19Mn5Cu(PO4)6
Mn5CuO12	3.94	K3.94	K3.94Mn5CuO12
Mn5Fe(PO4)6	3.88	K3.88	K3.88Mn5Fe(PO4)6
Mn5Fe3O16	4.87	K4.87	K4.87Mn5Fe3O16
Mn5FeO12	3.81	K3.81	K3.81Mn5FeO12
Mn5Ni(PO4)6	3.99	K3.99	K3.99Mn5Ni(PO4)6
Mn5NiO12	3.84	K3.84	K3.84Mn5NiO12
Mn5O3F5	1.48	K1.48	K1.48Mn5O3F5
Mn5O5F	1.42	K1.42	K1.42Mn5O5F
Mn5O7F	1.5	K1.5	K1.5Mn5O7F
Mn5O8	2.48	K2.48	K2.48Mn5O8
Mn5O9F	2.2	K2.2	K2.2Mn5O9F
Mn5OF11	2.75	K2.75	K2.75Mn5OF11
Mn5P6WO24	3.15	K3.15	K3.15Mn5P6WO24
Mn5Sb(PO4)6	4.24	K4.24	K4.24Mn5Sb(PO4)6
Mn5Sb3O16	5.02	K5.02	K5.02Mn5Sb3O16

Mn5Sn(PO4)6	4.09	K4.09	K4.09Mn5Sn(PO4)6
Mn5SnO12	3.77	K3.77	K3.77Mn5SnO12
Mn5Te3O16	5.35	K5.35	K5.35Mn5Te3O16
Mn5V(PO4)6	4.41	K4.41	K4.41Mn5V(PO4)6
Mn7(OF3)3	2.56	K2.56	K2.56Mn7(OF3)3
Mn7(P2O7)4	5	K5	K5Mn7(P2O7)4
Mn7(PO4)6	4.92	K4.92	K4.92Mn7(PO4)6
Mn7F16	2.33	K2.33	K2.33Mn7F16
Mn7Fe3O20	5.12	K5.12	K5.12Mn7Fe3O20
Mn7Nb(PO4)12	5.92	K5.92	K5.92Mn7Nb(PO4)12
Mn7O12	2.91	K2.91	K2.91Mn7O12
Mn7O7F	1.92	K1.92	K1.92Mn7O7F
Mn7Sb(PO4)12	5.75	K5.75	K5.75Mn7Sb(PO4)12
Mn7V(PO4)12	5.7	K5.7	K5.7Mn7V(PO4)12
Mn9(P2O7)8	3.88	K3.88	K3.88Mn9(P2O7)8
MnAs	0.8	K0.8	K0.8MnAs
MnCo(PO4)2	2.41	K2.41	K2.41MnCo(PO4)2
MnCo3(PO4)4	4	K4	K4MnCo3(PO4)4
MnCo3O8	1.95	K1.95	K1.95MnCo3O8
MnCo5O12	4.03	K4.03	K4.03MnCo5O12
MnCoO4	1.33	K1.33	K1.33MnCoO4
MnCr(PO4)2	1.7	K1.7	K1.7MnCr(PO4)2
MnCr2Fe3(PO4)6	4.12	K4.12	K4.12MnCr2Fe3(PO4)6
MnCr3(PO4)4	3.35	K3.35	K3.35MnCr3(PO4)4

MnCr3O8	1.7	K1.7	K1.7MnCr3O8
MnCSO7	2.02	K2.02	K2.02MnCSO7
MnF3	0.58	K0.58	K0.58MnF3
MnFe(PO4)2	1.59	K1.59	K1.59MnFe(PO4)2
MnFe2(PO4)3	1.95	K1.95	K1.95MnFe2(PO4)3
MnFe3(PO4)4	3.8	K3.8	K3.8MnFe3(PO4)4
MnFe7(PO4)8	5.09	K5.09	K5.09MnFe7(PO4)8
MnFeCo(PO4)3	2.71	K2.71	K2.71MnFeCo(PO4)3
MnH4(SO5)2	2.01	K2.01	K2.01MnH4(SO5)2
MnH6(S2O9)2	2.71	K2.71	K2.71MnH6(S2O9)2
MnH8(SO6)2	1.7	K1.7	K1.7MnH8(SO6)2
MnNb4O12	2.87	K2.87	K2.87MnNb4O12
MnNi(PO4)2	1.97	K1.97	K1.97MnNi(PO4)2
MnNi3(PO4)4	3.94	K3.94	K3.94MnNi3(PO4)4
MnO2	0.72	K0.72	K0.72MnO2
MnO2	0.66	K0.66	K0.66MnO2
MnP2HO7	1.68	K1.68	K1.68MnP2HO7
MnP2O7	1.76	K1.76	K1.76MnP2O7
MnPHO5	1.43	K1.43	K1.43MnPHO5
MnPO4	0.77	K0.77	K0.77MnPO4
MnPO4F	1.1	K1.1	K1.1MnPO4F
MnS2	0.76	K0.76	K0.76MnS2
MnSn(PO4)2	2.11	K2.11	K2.11MnSn(PO4)2
MnV(P2O7)2	3.16	K3.16	K3.16MnV(P2O7)2

MnV(PO4)2	1.9	K1.9	K1.9MnV(PO4)2
MnV2(PO4)3	2.08	K2.08	K2.08MnV2(PO4)3
MnV3(PO4)4	4.14	K4.14	K4.14MnV3(PO4)4
MnV3O8	2.43	K2.43	K2.43MnV3O8
MnV4CoO12	3.2	K3.2	K3.2MnV4CoO12
MnV4CuO12	3.15	K3.15	K3.15MnV4CuO12
MnV4FeO12	3.49	K3.49	K3.49MnV4FeO12
MnV4NiO12	3.07	K3.07	K3.07MnV4NiO12
MnV4O12	2.9	K2.9	K2.9MnV4O12
MnV5O12	3.71	K3.71	K3.71MnV5O12
MnVO4	1.27	K1.27	K1.27MnVO4
MnVP2(O4F)2	2.64	K2.64	K2.64MnVP2(O4F)2
Mo(PO3)4	1.91	K1.91	K1.91Mo(PO3)4
Mo(PO4)2	1.16	K1.16	K1.16Mo(PO4)2
Mo15S19	2.32	K2.32	K2.32Mo15S19
Mo15Se19	1.9	K1.9	K1.9Mo15Se19
Mo2(PO4)3	1.9	K1.9	K1.9Mo2(PO4)3
Mo2P2O11	2.52	K2.52	K2.52Mo2P2O11
Mo2P2O9	1.97	K1.97	K1.97Mo2P2O9
Mo2P3O13	1.87	K1.87	K1.87Mo2P3O13
Mo3O8	2.46	K2.46	K2.46Mo3O8
Mo3P3O13	2.95	K2.95	K2.95Mo3P3O13
Mo3S4	1.93	K1.93	K1.93Mo3S4
Mo3Se4	2.41	K2.41	K2.41Mo3Se4

Mo4P5O24	3.16	K3.16	K3.16Mo4P5O24
Mo4P9O32	3.54	K3.54	K3.54Mo4P9O32
MoO2	0.5	K0.5	K0.5MoO2
MoP2O7	1.36	K1.36	K1.36MoP2O7
MoPO5	1.04	K1.04	K1.04MoPO5
Na(NbSe2)2	2.19	K2.19	K2.19Na(NbSe2)2
Na2(CrSe2)3	2.56	K2.56	K2.56Na2(CrSe2)3
Na2Bi2C4SO16	2.62	K2.62	K2.62Na2Bi2C4SO16
Na2BiBAsO7	1.27	K1.27	K1.27Na2BiBAsO7
Na2BiBPO7	1.17	K1.17	K1.17Na2BiBPO7
Na2C	0.24	K0.24	K0.24Na2C
Na2CaVP2O9	1.16	K1.16	K1.16Na2CaVP2O9
Na2CoBAsO7	1.36	K1.36	K1.36Na2CoBAsO7
Na2CoO3	1.11	K1.11	K1.11Na2CoO3
Na2CoSiCO7	1.23	K1.23	K1.23Na2CoSiCO7
Na2CuAsCO7	1.41	K1.41	K1.41Na2CuAsCO7
Na2CuBSO7	1.17	K1.17	K1.17Na2CuBSO7
Na2CuP2O7	1.27	K1.27	K1.27Na2CuP2O7
Na2CuPCO7	1.3	K1.3	K1.3Na2CuPCO7
Na2FeBAsO7	1.35	K1.35	K1.35Na2FeBAsO7
Na2FeBPO7	1.23	K1.23	K1.23Na2FeBPO7
Na2FeO4	1.1	K1.1	K1.1Na2FeO4
Na2Mn(PO3)5	1.98	K1.98	K1.98Na2Mn(PO3)5
Na2MnBAsO7	1.36	K1.36	K1.36Na2MnBAsO7

Na2MnBPO7	1.23	K1.23	K1.23Na2MnBPO7
Na2MnBSO7	1.29	K1.29	K1.29Na2MnBSO7
Na2MnCoNiO6	1.41	K1.41	K1.41Na2MnCoNiO6
Na2MnPCO7	1.23	K1.23	K1.23Na2MnPCO7
Na2Ni2O5	1.16	K1.16	K1.16Na2Ni2O5
Na2NiO2	0.88	K0.88	K0.88Na2NiO2
Na2SiBiBO7	1.17	K1.17	K1.17Na2SiBiBO7
Na2SiBSbO7	1.38	K1.38	K1.38Na2SiBSbO7
Na2SiSnCO7	1.25	K1.25	K1.25Na2SiSnCO7
Na2SrVP2O9	1.2	K1.2	K1.2Na2SrVP2O9
Na2Ti4O9	1.5	K1.5	K1.5Na2Ti4O9
Na2TlPCO7	1.25	K1.25	K1.25Na2TlPCO7
Na2V3P2O13	1.7	K1.7	K1.7Na2V3P2O13
Na2VBAsO7	1.13	K1.13	K1.13Na2VBAsO7
Na2VBPO7	0.94	K0.94	K0.94Na2VBPO7
Na2VPO6	1.03	K1.03	K1.03Na2VPO6
Na3(CuO2)2	1.24	K1.24	K1.24Na3(CuO2)2
Na3CuPCO7	1.26	K1.26	K1.26Na3CuPCO7
Na3Fe2P(CO4)4	2.38	K2.38	K2.38Na3Fe2P(CO4)4
Na3Fe3(PO4)4	2.26	K2.26	K2.26Na3Fe3(PO4)4
Na3Li4Mn5O9	2.29	K2.29	K2.29Na3Li4Mn5O9
Na3Mn2P2(CO7)2	1.7	K1.7	K1.7Na3Mn2P2(CO7)2
Na3MnBPO7	1.12	K1.12	K1.12Na3MnBPO7
Na3SbP2O9	1.66	K1.66	K1.66Na3SbP2O9

Na4B4Sb2SO16	1.71	K1.71	K1.71Na4B4Sb2SO16
Na4Bi2As(CO4)4	2.18	K2.18	K2.18Na4Bi2As(CO4)4
Na4Bi2B4SO16	1.64	K1.64	K1.64Na4Bi2B4SO16
Na4Bi2P(CO4)4	2.14	K2.14	K2.14Na4Bi2P(CO4)4
Na4Co2P(CO4)4	2.04	K2.04	K2.04Na4Co2P(CO4)4
Na4Cr2As(CO4)4	2.13	K2.13	K2.13Na4Cr2As(CO4)4
Na4Cr2C4SO16	2.08	K2.08	K2.08Na4Cr2C4SO16
Na4Cr2P(CO4)4	1.99	K1.99	K1.99Na4Cr2P(CO4)4
Na4Cu2C4SO16	1.85	K1.85	K1.85Na4Cu2C4SO16
Na4Fe2As(CO4)4	2.25	K2.25	K2.25Na4Fe2As(CO4)4
Na4Mn2As(CO4)4	2.34	K2.34	K2.34Na4Mn2As(CO4)4
Na4Mn2P(CO4)4	2.17	K2.17	K2.17Na4Mn2P(CO4)4
Na4Sn2C4SO16	2.08	K2.08	K2.08Na4Sn2C4SO16
Na4Ti11O24	3.78	K3.78	K3.78Na4Ti11O24
Na4Ti3O8	1.45	K1.45	K1.45Na4Ti3O8
Na4V2C4SO16	1.77	K1.77	K1.77Na4V2C4SO16
Na4V2P(CO4)4	1.73	K1.73	K1.73Na4V2P(CO4)4
Na5Co2As(CO4)4	1.75	K1.75	K1.75Na5Co2As(CO4)4
Na5Cu7O13	1.85	K1.85	K1.85Na5Cu7O13
Na5CuO4	1.22	K1.22	K1.22Na5CuO4
Na5Fe2P2(CO7)2	2.05	K2.05	K2.05Na5Fe2P2(CO7)2
Na5Fe6(SiO3)12	3.84	K3.84	K3.84Na5Fe6(SiO3)12
Na5Mn2O8	1.63	K1.63	K1.63Na5Mn2O8
Na5Mn2P2(CO7)2	1.81	K1.81	K1.81Na5Mn2P2(CO7)2

Na5Ni2As(CO4)4	1.78	K1.78	K1.78Na5Ni2As(CO4)4
Na5Ni2P2(CO7)2	1.89	K1.89	K1.89Na5Ni2P2(CO7)2
Na5Sn2P(CO4)4	1.52	K1.52	K1.52Na5Sn2P(CO4)4
Na9Fe10(SiO3)20	3.78	K3.78	K3.78Na9Fe10(SiO3)20
NaBiAsCO7	1.84	K1.84	K1.84NaBiAsCO7
NaBiF6	1.55	K1.55	K1.55NaBiF6
NaCePCO7	1.24	K1.24	K1.24NaCePCO7
NaCoAsCO7	1.69	K1.69	K1.69NaCoAsCO7
NaCoCSO7	1.53	K1.53	K1.53NaCoCSO7
NaCoPCO7	1.48	K1.48	K1.48NaCoPCO7
NaCrAsCO7	1.65	K1.65	K1.65NaCrAsCO7
NaCrCSO7	1.48	K1.48	K1.48NaCrCSO7
NaCrF6	1.45	K1.45	K1.45NaCrF6
NaCrPCO7	1.46	K1.46	K1.46NaCrPCO7
NaCu(PO3)3	1.37	K1.37	K1.37NaCu(PO3)3
NaCuCSO7	1.47	K1.47	K1.47NaCuCSO7
NaCuO2	0.68	K0.68	K0.68NaCuO2
NaCuP2O7	1.29	K1.29	K1.29NaCuP2O7
NaFePCO7	1.58	K1.58	K1.58NaFePCO7
NaGePCO7	1.76	K1.76	K1.76NaGePCO7
NaMn4O8	2.16	K2.16	K2.16NaMn4O8
NaMnPCO7	1.69	K1.69	K1.69NaMnPCO7
NaNdPCO7	1.23	K1.23	K1.23NaNdPCO7
NaSbF6	1.63	K1.63	K1.63NaSbF6

NaSiSbCO7	1.91	K1.91	K1.91NaSiSbCO7
NaSn	0.42	K0.42	K0.42NaSn
NaSnAsCO7	2.02	K2.02	K2.02NaSnAsCO7
NaSnPCO7	1.78	K1.78	K1.78NaSnPCO7
NaTi2(PO4)3	1.53	K1.53	K1.53NaTi2(PO4)3
NaTiPCO7	1.34	K1.34	K1.34NaTiPCO7
NaV2(PO4)3	1.84	K1.84	K1.84NaV2(PO4)3
NaV3O8	1.79	K1.79	K1.79NaV3O8
NaV3P2O13	1.73	K1.73	K1.73NaV3P2O13
NaVAsCO7	1.55	K1.55	K1.55NaVAsCO7
NaVCSO7	1.24	K1.24	K1.24NaVCSO7
NaVPCO7	1.41	K1.41	K1.41NaVPCO7
Nb(PO3)4	2.66	K2.66	K2.66Nb(PO3)4
Nb2(PO4)3	1.94	K1.94	K1.94Nb2(PO4)3
Nb3S4	1.33	K1.33	K1.33Nb3S4
Nb3Se4	1.72	K1.72	K1.72Nb3Se4
Nb3Te4	1.82	K1.82	K1.82Nb3Te4
Nb4VO12	2.99	K2.99	K2.99Nb4VO12
NbCr3(PO4)6	3.34	K3.34	K3.34NbCr3(PO4)6
NbF5	0.78	K0.78	K0.78NbF5
NbFe3Cu2(PO4)6	4.08	K4.08	K4.08NbFe3Cu2(PO4)6
NbFe5(PO4)6	3.62	K3.62	K3.62NbFe5(PO4)6
NbFeO4	1.12	K1.12	K1.12NbFeO4
NbO2	0.73	K0.73	K0.73NbO2

NbO2F	0.88	K0.88	K0.88NbO2F
NbO3	0.94	K0.94	K0.94NbO3
NbPO5	1.19	K1.19	K1.19NbPO5
NbS2	0.81	K0.81	K0.81NbS2
NbSe2	1.09	K1.09	K1.09NbSe2
NbV3(PO4)6	3.53	K3.53	K3.53NbV3(PO4)6
NbV3O8	1.8	K1.8	K1.8NbV3O8
NbWO7	1.34	K1.34	K1.34NbWO7
Ni	0.13	K0.13	K0.13Ni
Ni(PS3)2	1.98	K1.98	K1.98Ni(PS3)2
Ni2P2O9	1.91	K1.91	K1.91Ni2P2O9
Ni3(P2O7)2	2.58	K2.58	K2.58Ni3(P2O7)2
Ni3O4	0.9	K0.9	K0.9Ni3O4
Ni3O4	1.08	K1.08	K1.08Ni3O4
Ni3P3O11	1.78	K1.78	K1.78Ni3P3O11
Ni3P4O15	2.08	K2.08	K2.08Ni3P4O15
Ni3Sb(PO4)4	4.28	K4.28	K4.28Ni3Sb(PO4)4
Ni3Sn(PO4)4	3.86	K3.86	K3.86Ni3Sn(PO4)4
Ni4(PO4)3	2.29	K2.29	K2.29Ni4(PO4)3
Ni4P4O15	1.62	K1.62	K1.62Ni4P4O15
Ni5O6	1.19	K1.19	K1.19Ni5O6
Ni6O7	1.23	K1.23	K1.23Ni6O7
Ni9O10	1.45	K1.45	K1.45Ni9O10
Ni9S10	2.14	K2.14	K2.14Ni9S10

NiCO4	0.79	K0.79	K0.79NiCO4
NiH8(CO5)2	1.64	K1.64	K1.64NiH8(CO5)2
NiO2	0.7	K0.7	K0.7NiO2
NiPO4	1.17	K1.17	K1.17NiPO4
NiS2	0.73	K0.73	K0.73NiS2
NiSn(PO4)2	1.82	K1.82	K1.82NiSn(PO4)2
P(W3O10)4	1.42	K1.42	K1.42P(W3O10)4
P(WO4)2	1.41	K1.41	K1.41P(WO4)2
P2WO7	1.43	K1.43	K1.43P2WO7
P2WO8	1.07	K1.07	K1.07P2WO8
P3(WO6)2	1.82	K1.82	K1.82P3(WO6)2
P3W2O13	1.68	K1.68	K1.68P3W2O13
P4WO12	1.56	K1.56	K1.56P4WO12
P5WO15	1.71	K1.71	K1.71P5WO15
P8W3O29	2.74	K2.74	K2.74P8W3O29
PrTi2O6	1.15	K1.15	K1.15PrTi2O6
PWO5	1.1	K1.1	K1.1PWO5
Rb2CoF6	1.42	K1.42	K1.42Rb2CoF6
Rb2CrF6	1.78	K1.78	K1.78Rb2CrF6
Rb2CuF6	1.46	K1.46	K1.46Rb2CuF6
Rb2MoBr6	2.65	K2.65	K2.65Rb2MoBr6
Rb2NiF6	1.38	K1.38	K1.38Rb2NiF6
Rb2SbBr6	2.5	K2.5	K2.5Rb2SbBr6
Rb2SbCl6	1.84	K1.84	K1.84Rb2SbCl6

Rb2VCl6	1.7	K1.7	K1.7Rb2VCl6
Rb2VF6	1.49	K1.49	K1.49Rb2VF6
RbSb	1.3	K1.3	K1.3RbSb
RbV(PO4)2	1.58	K1.58	K1.58RbV(PO4)2
RbVPO5	1.06	K1.06	K1.06RbVPO5
ReO3	0.83	K0.83	K0.83ReO3
Sb	0.32	K0.32	K0.32Sb
Sb(PO3)4	1.47	K1.47	K1.47Sb(PO3)4
Sb(SO4)2	1.07	K1.07	K1.07Sb(SO4)2
Sb11S18	3.92	K3.92	K3.92Sb11S18
Sb17S27	3.41	K3.41	K3.41Sb17S27
Sb2(PO4)3	1.83	K1.83	K1.83Sb2(PO4)3
Sb2P5O16	2.07	K2.07	K2.07Sb2P5O16
SbN3(O3F)3	1.6	K1.6	K1.6SbN3(O3F)3
SbO3	0.8	K0.8	K0.8SbO3
SbP(OF3)2	1.63	K1.63	K1.63SbP(OF3)2
SbP2O7	0.94	K0.94	K0.94SbP2O7
SbPHO5	1.07	K1.07	K1.07SbPHO5
SbPO5	1.11	K1.11	K1.11SbPO5
SbSO4F3	1.39	K1.39	K1.39SbSO4F3
SbWO7	1.28	K1.28	K1.28SbWO7
ScSn	0.84	K0.84	K0.84ScSn
Si6BiO14	1.06	K1.06	K1.06Si6BiO14
SiBi3O7	1.2	K1.2	K1.2SiBi3O7

Sn	0.2	K0.2	K0.2Sn
Sn(PO3)3	1.48	K1.48	K1.48Sn(PO3)3
Sn(SO4)2	1.22	K1.22	K1.22Sn(SO4)2
Sn2(PO3)5	2.24	K2.24	K2.24Sn2(PO3)5
Sn2(SO4)3	1.89	K1.89	K1.89Sn2(SO4)3
Sn4(PO4)3	1.76	K1.76	K1.76Sn4(PO4)3
Sn6P7O24	2.33	K2.33	K2.33Sn6P7O24
SnO2	0.87	K0.87	K0.87SnO2
SnP2O7	1.49	K1.49	K1.49SnP2O7
SnPHO5	1.23	K1.23	K1.23SnPHO5
SnPO4	0.92	K0.92	K0.92SnPO4
SnS2	0.88	K0.88	K0.88SnS2
Sr2LiNb3O10	3	K3	K3Sr2LiNb3O10
Sr3Nb4O13	1.96	K1.96	K1.96Sr3Nb4O13
SrLa3MnO8	1.92	K1.92	K1.92SrLa3MnO8
SrLiLa15(CoO8)4	4.71	K4.71	K4.71SrLiLa15(CoO8)4
Ta2CuO6	1.77	K1.77	K1.77Ta2CuO6
TaWO7	1.41	K1.41	K1.41TaWO7
TbSn2	0.99	K0.99	K0.99TbSn2
Ti(CoO3)2	2.5	K2.5	K2.5Ti(CoO3)2
Ti(PO3)4	1.71	K1.71	K1.71Ti(PO3)4
Ti(SiO3)2	1.43	K1.43	K1.43Ti(SiO3)2
Ti(SO4)2	1.1	K1.1	K1.1Ti(SO4)2
Ti12Fe5O32	2.66	K2.66	K2.66Ti12Fe5O32

Ti13O22	1.76	K1.76	K1.76Ti13O22
Ti16CuS32	1.19	K1.19	K1.19Ti16CuS32
Ti2(PO4)3	1.84	K1.84	K1.84Ti2(PO4)3
Ti2Mn3Co3O16	6.2	K6.2	K6.2Ti2Mn3Co3O16
Ti2Mn3Fe3O16	6.23	K6.23	K6.23Ti2Mn3Fe3O16
Ti2Ni(PO5)2	2.55	K2.55	K2.55Ti2Ni(PO5)2
Ti2P2O9	1.55	K1.55	K1.55Ti2P2O9
Ti3Co3(SbO8)2	5.79	K5.79	K5.79Ti3Co3(SbO8)2
Ti3Co3(TeO8)2	5.67	K5.67	K5.67Ti3Co3(TeO8)2
Ti3Cr(PO4)6	3.62	K3.62	K3.62Ti3Cr(PO4)6
Ti3Cr3(SbO8)2	4.32	K4.32	K4.32Ti3Cr3(SbO8)2
Ti3Cu3(TeO8)2	4.88	K4.88	K4.88Ti3Cu3(TeO8)2
Ti3Fe(PO4)6	3.43	K3.43	K3.43Ti3Fe(PO4)6
Ti3Fe3(SbO8)2	5.78	K5.78	K5.78Ti3Fe3(SbO8)2
Ti3Mn3(SbO8)2	4.92	K4.92	K4.92Ti3Mn3(SbO8)2
Ti3Mn3(SnO8)2	6.27	K6.27	K6.27Ti3Mn3(SnO8)2
Ti3Mn3(TeO8)2	6.38	K6.38	K6.38Ti3Mn3(TeO8)2
Ti3Mn3Cr2O16	5.76	K5.76	K5.76Ti3Mn3Cr2O16
Ti3Mn5O16	4.73	K4.73	K4.73Ti3Mn5O16
Ti3MnO8	1.99	K1.99	K1.99Ti3MnO8
Ti3Nb(CuO4)3	2.77	K2.77	K2.77Ti3Nb(CuO4)3
Ti3Nb2Cr3O16	4.13	K4.13	K4.13Ti3Nb2Cr3O16
Ti3Nb2V3O16	3.98	K3.98	K3.98Ti3Nb2V3O16
Ti3NbO8	1.85	K1.85	K1.85Ti3NbO8

Ti3Ni3(TeO8)2	5.82	K5.82	K5.82Ti3Ni3(TeO8)2
Ti3O4	1.07	K1.07	K1.07Ti3O4
Ti3P3O13	2.24	K2.24	K2.24Ti3P3O13
Ti3Se4	1.16	K1.16	K1.16Ti3Se4
Ti3V5O16	4.53	K4.53	K4.53Ti3V5O16
Ti3VO8	1.82	K1.82	K1.82Ti3VO8
Ti3Zn2O8	1.31	K1.31	K1.31Ti3Zn2O8
Ti4(CuO4)3	2.74	K2.74	K2.74Ti4(CuO4)3
Ti4Mn(PO4)6	3.97	K3.97	K3.97Ti4Mn(PO4)6
Ti4VO8	2.74	K2.74	K2.74Ti4VO8
Ti5Mn3O16	5.8	K5.8	K5.8Ti5Mn3O16
Ti6Co3O16	2.66	K2.66	K2.66Ti6Co3O16
Ti8O13	3.14	K3.14	K3.14Ti8O13
TiAgF6	1.71	K1.71	K1.71TiAgF6
TiCo3O8	2.98	K2.98	K2.98TiCo3O8
TiCo5O12	3.06	K3.06	K3.06TiCo5O12
TiCr2Ni3(PO4)6	5.1	K5.1	K5.1TiCr2Ni3(PO4)6
TiCr3(PO4)6	3.47	K3.47	K3.47TiCr3(PO4)6
TiCrO4	1.5	K1.5	K1.5TiCrO4
TiCu3(PO4)4	3.52	K3.52	K3.52TiCu3(PO4)4
TiCuF6	1.5	K1.5	K1.5TiCuF6
TiF3	0.77	K0.77	K0.77TiF3
TiFe2Ni3(PO4)6	5.02	K5.02	K5.02TiFe2Ni3(PO4)6
TiFe3(PO4)6	3.66	K3.66	K3.66TiFe3(PO4)6

TiFe3Cu2(PO4)6	4.79	K4.79	K4.79TiFe3Cu2(PO4)6
TiFeO4	1.39	K1.39	K1.39TiFeO4
TiMn2O6	2.6	K2.6	K2.6TiMn2O6
TiMn3(PO4)6	3.99	K3.99	K3.99TiMn3(PO4)6
TiMn3Cr2(PO4)6	4.85	K4.85	K4.85TiMn3Cr2(PO4)6
TiMn3O8	1.78	K1.78	K1.78TiMn3O8
TiMn5O12	3.71	K3.71	K3.71TiMn5O12
TiMn9O20	5.87	K5.87	K5.87TiMn9O20
TiMnO4	1.52	K1.52	K1.52TiMnO4
TiNCl	0.73	K0.73	K0.73TiNCl
TiO2	0.44	K0.44	K0.44TiO2
TiP2O7	1.23	K1.23	K1.23TiP2O7
TiPO4	1.01	K1.01	K1.01TiPO4
TiPO4F	1.4	K1.4	K1.4TiPO4F
TiS2	0.85	K0.85	K0.85TiS2
TiSe2	1.01	K1.01	K1.01TiSe2
TiSiO4	0.92	K0.92	K0.92TiSiO4
TiTe2	1.11	K1.11	K1.11TiTe2
TiV3O8	1.79	K1.79	K1.79TiV3O8
TiVO4	1.25	K1.25	K1.25TiVO4
Tl2CrF6	1.79	K1.79	K1.79Tl2CrF6
V(CO3)2	1.25	K1.25	K1.25V(CO3)2
V(NF3)2	1.21	K1.21	K1.21V(NF3)2
V(PO3)3	1.72	K1.72	K1.72V(PO3)3

V(PO3)4	2.89	K2.89	K2.89V(PO3)4
V(SiO3)2	1.23	K1.23	K1.23V(SiO3)2
V(SO4)2	1.19	K1.19	K1.19V(SO4)2
V12O29	2.99	K2.99	K2.99V12O29
V2(OF)3	0.95	K0.95	K0.95V2(OF)3
V2(PO4)3	1.7	K1.7	K1.7V2(PO4)3
V2(SO4)3	1.84	K1.84	K1.84V2(SO4)3
V2CoO6	1.11	K1.11	K1.11V2CoO6
V2Cr(PO4)3	1.78	K1.78	K1.78V2Cr(PO4)3
V2Cr3Sb3O16	5.31	K5.31	K5.31V2Cr3Sb3O16
V2Cu(PO4)3	1.91	K1.91	K1.91V2Cu(PO4)3
V2F7	1.34	K1.34	K1.34V2F7
V2NiO6	1.33	K1.33	K1.33V2NiO6
V2O2F3	1.08	K1.08	K1.08V2O2F3
V2O3F	0.91	K0.91	K0.91V2O3F
V2O5	1.09	K1.09	K1.09V2O5
V2OF5	0.87	K0.87	K0.87V2OF5
V2OF6	1.24	K1.24	K1.24V2OF6
V2OF7	1.49	K1.49	K1.49V2OF7
V2P2O9	1.65	K1.65	K1.65V2P2O9
V2P4H3O16	3.84	K3.84	K3.84V2P4H3O16
V2Si4O11	1.96	K1.96	K1.96V2Si4O11
V2Sn(PO4)3	1.94	K1.94	K1.94V2Sn(PO4)3
V3(O2F)2	1.24	K1.24	K1.24V3(O2F)2

V3(OF)4	1.47	K1.47	K1.47V3(OF)4
V3(OF3)2	1.54	K1.54	K1.54V3(OF3)2
V3(P2O7)2	2.63	K2.63	K2.63V3(P2O7)2
V3(PO4)4	2.87	K2.87	K2.87V3(PO4)4
V3Bi2(PO4)6	3.36	K3.36	K3.36V3Bi2(PO4)6
V3Co(PO4)4	3.47	K3.47	K3.47V3Co(PO4)4
V3Co3(TeO8)2	4.29	K4.29	K4.29V3Co3(TeO8)2
V3CoO8	1.01	K1.01	K1.01V3CoO8
V3Cr(PO4)6	3.34	K3.34	K3.34V3Cr(PO4)6
V3Cr3(SbO8)2	4.28	K4.28	K4.28V3Cr3(SbO8)2
V3Cr3(TeO8)2	4.45	K4.45	K4.45V3Cr3(TeO8)2
V3Cr3(WO8)2	3.39	K3.39	K3.39V3Cr3(WO8)2
V3CrO8	2.35	K2.35	K2.35V3CrO8
V3Cu(PO4)4	2.76	K2.76	K2.76V3Cu(PO4)4
V3Cu(PO4)6	3.28	K3.28	K3.28V3Cu(PO4)6
V3CuO8	1.3	K1.3	K1.3V3CuO8
V3Fe(PO4)6	3.11	K3.11	K3.11V3Fe(PO4)6
V3Fe2CuO12	2.77	K2.77	K2.77V3Fe2CuO12
V3Fe2CuO12	2.77	K2.77	K2.77V3Fe2CuO12
V3Fe3(TeO8)2	5.44	K5.44	K5.44V3Fe3(TeO8)2
V3FeO8	1.56	K1.56	K1.56V3FeO8
V3Ni(PO4)4	3.48	K3.48	K3.48V3Ni(PO4)4
V3Ni(PO4)6	3.07	K3.07	K3.07V3Ni(PO4)6
V3NiO8	2.33	K2.33	K2.33V3NiO8

V3O5F	1.22	K1.22	K1.22V3O5F
V3O7	0.77	K0.77	K0.77V3O7
V3OF11	1.74	K1.74	K1.74V3OF11
V3P3O13	2.59	K2.59	K2.59V3P3O13
V3P6WO24	2.74	K2.74	K2.74V3P6WO24
V3S4	0.76	K0.76	K0.76V3S4
V3Si3O10	2.02	K2.02	K2.02V3Si3O10
V3Zn2O8	1.5	K1.5	K1.5V3Zn2O8
V4(CuO4)3	2.46	K2.46	K2.46V4(CuO4)3
V4(OF3)3	1.75	K1.75	K1.75V4(OF3)3
V4(PO4)3	1.8	K1.8	K1.8V4(PO4)3
V4CrCuO12	2.82	K2.82	K2.82V4CrCuO12
V4CuNiO12	2.82	K2.82	K2.82V4CuNiO12
V4FeO12	2.72	K2.72	K2.72V4FeO12
V4O5F7	1.96	K1.96	K1.96V4O5F7
V4O7F5	1.6	K1.6	K1.6V4O7F5
V4OF11	1.71	K1.71	K1.71V4OF11
V4Si4O13	2.69	K2.69	K2.69V4Si4O13
V5(BO5)2	2.18	K2.18	K2.18V5(BO5)2
V5(P3O11)2	3.4	K3.4	K3.4V5(P3O11)2
V5CoO12	2.74	K2.74	K2.74V5CoO12
V5CuO12	2.68	K2.68	K2.68V5CuO12
V5F11	1.78	K1.78	K1.78V5F11
V5O12	2.01	K2.01	K2.01V5O12

V6F13	2.19	K2.19	K2.19V6F13
V6O11	1.95	K1.95	K1.95V6O11
V6O13	2.53	K2.53	K2.53V6O13
V6O5F19	2.56	K2.56	K2.56V6O5F19
V6O7F5	1.98	K1.98	K1.98V6O7F5
V9O22	2.55	K2.55	K2.55V9O22
VBO4	0.88	K0.88	K0.88VBO4
VCo3(PO4)4	3.71	K3.71	K3.71VCo3(PO4)4
VCoO4	1.09	K1.09	K1.09VCoO4
VCr(P2O7)2	2.65	K2.65	K2.65VCr(P2O7)2
VCr2Ni3(PO4)6	4.49	K4.49	K4.49VCr2Ni3(PO4)6
VCrO4	0.97	K0.97	K0.97VCrO4
VCrP2(HO5)2	2.64	K2.64	K2.64VCrP2(HO5)2
VCrP2(O4F)2	2.75	K2.75	K2.75VCrP2(O4F)2
VF3	0.59	K0.59	K0.59VF3
VF4	0.81	K0.81	K0.81VF4
VF5	0.93	K0.93	K0.93VF5
VFe(P2O7)2	2.56	K2.56	K2.56VFe(P2O7)2
VFe(PO4)2	2.17	K2.17	K2.17VFe(PO4)2
VFe3(PO4)4	3.59	K3.59	K3.59VFe3(PO4)4
VFe3(PO4)6	3.18	K3.18	K3.18VFe3(PO4)6
VFeO4	1.1	K1.1	K1.1VFeO4
VFeP2(HO5)2	2.77	K2.77	K2.77VFeP2(HO5)2
VFeP2(O4F)2	2.52	K2.52	K2.52VFeP2(O4F)2

VNi(PO4)2	1.62	K1.62	K1.62VNi(PO4)2
VO2	0.34	K0.34	K0.34VO2
VO2F	0.58	K0.58	K0.58VO2F
VOF3	0.79	K0.79	K0.79VOF3
VP2O7	1.52	K1.52	K1.52VP2O7
VPHO5	1.38	K1.38	K1.38VPHO5
VPO4	1.02	K1.02	K1.02VPO4
VPO5	0.95	K0.95	K0.95VPO5
VS2	0.76	K0.76	K0.76VS2
VSe2	1.01	K1.01	K1.01VSe2
VSn(PO4)2	1.91	K1.91	K1.91VSn(PO4)2
W3Br7	1.64	K1.64	K1.64W3Br7
WCl6	1.51	K1.51	K1.51WCl6
WF6	0.83	K0.83	K0.83WF6
WO2	0.75	K0.75	K0.75WO2
WO3	0.67	K0.67	K0.67WO3
Y2Ti2S2O5	1.41	K1.41	K1.41Y2Ti2S2O5
YSb2	2.12	K2.12	K2.12YSb2
ZnCr3(SO4)6	3.5	K3.5	K3.5ZnCr3(SO4)6
ZnFe(PO4)2	2.24	K2.24	K2.24ZnFe(PO4)2
Zr6Cl14	2.58	K2.58	K2.58Zr6Cl14
Zr6MnCl14	3.71	K3.71	K3.71Zr6MnCl14