

FIG. 3. If cations are shifted in the way described by arrows, the trirutile structure is formed from the Li_2ZrF_6 structure type.

structure type. Amongst the ternary compounds of general formula AB_2X_6 a similar arrangement of (ordered) cations occurs in columbite FeNb_2O_6 . By analogy with the rutile $\rightleftharpoons \alpha\text{-PbO}_2$ transformation,

we might therefore expect the AB_2X_6 compounds discussed above to transform at high enough pressures to a ternary analog of $\alpha\text{-PbO}_2$, possibly with the cations ordered as in FeNb_2O_6 .

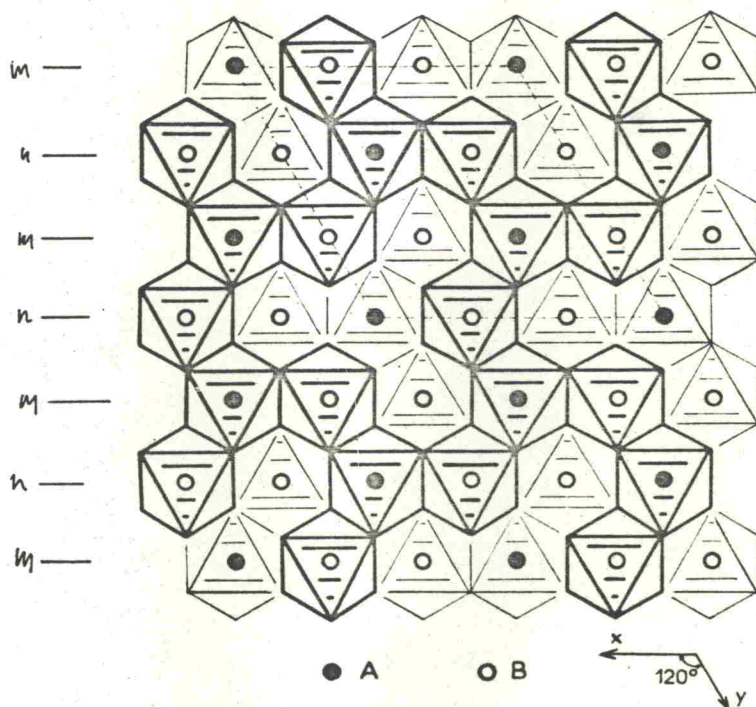


FIG. 4. The Na_2SiF_6 structure type.

osition AB_2X_6 . In both

n -planes to $z=0$. ned. This involves h octahedral faces on lattice remains their relative order ordered Na_2SiF_6 erse way, be geo- n the ordered tri- nd $\beta\text{-Li}_2\text{GeF}_6$ are with, respectively. res, indicates that bed here may very

approximately the d) anion arrange- ie preferred cation hat in the $\alpha\text{-PbO}_2$: