

FIG. 5. The trirutile structure type.

It would be interesting to study the effects of applied pressure in the high temperature experiments referred to above.

In the meantime a tentative pressure-temperature phase diagram is given in Fig. 6. Its construction is based on the observations that

- (a)  $\alpha$ - $\text{LiSnF}_6$  transforms to  $\beta$ - $\text{Li}_2\text{SnF}_6$ ,
- (b)  $\alpha$ - $\text{Li}_2\text{GeF}_6$  transforms to  $\beta$ - $\text{Li}_2\text{GeF}_6$  at high temperatures and
- (c) rutile transforms to a structure of the  $\alpha$ - $\text{PbO}_2$  type at high pressure.

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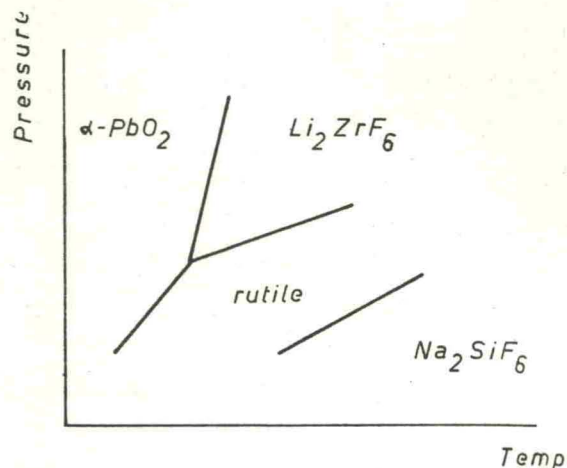


FIG. 6. Tentative temperature-pressure phase diagram for the various  $\text{MX}_2$  structure types discussed.

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