

Figure 3. Results for SmTe using  $\alpha = 0.844$  and lattice parameter of 12.09 a.u. The f-states for this are centered at 0.98 eV. All energies relative to the  $V_0$  value of -1.153 ry.

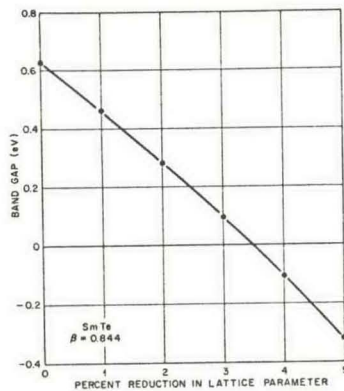


Figure 4. Band gap for SmTe as a function of percent reduction in lattice parameter from the normal value of 12.46 a.u.

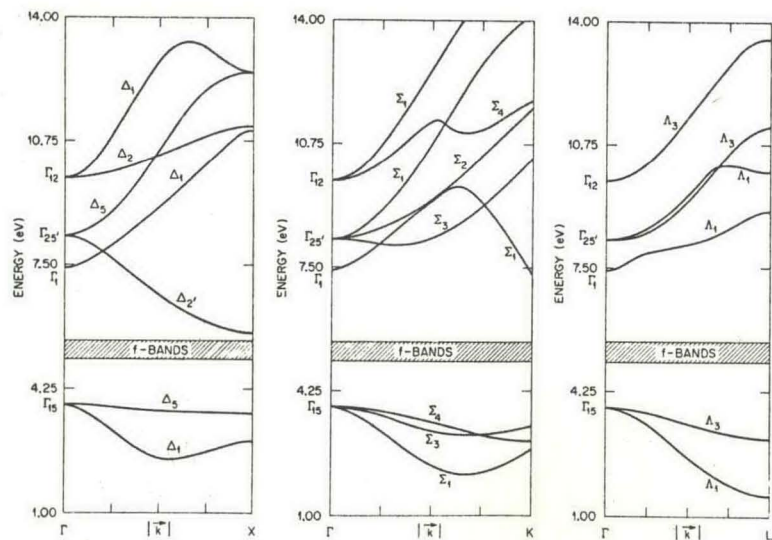


Figure 5. Calculated band structure for SmS using  $\alpha = 0.781$  and a lattice parameter of 11.28 a.u. All energies are relative to the  $V_0$  value of -1.152 ry.