

behaviour evidenced in the insert. On the contrary the T_1 and E levels follow with pressure the behaviour of the minima they belong to, as expected. The conduction band structure of the GeSi alloys varies with composition¹ in a manner similar to the variation of the Ge conduction band under hydrostatic pressure; at $P = 28 \cdot 10^3$ atm and Ge_{1-x}Si with $x = 15\%$ the ten $L_1 + \Delta_1$ minima lie in the crossing region. Consequently let us emphasize the following facts. (i) Two alternative experimental techniques, hydrostatic pressure

and/or GeSi alloys, may be devised to evidence the theoretical predictions; (ii) the possibility of controlling to some extent the binding energy of a shallow donor is *a priori* feasible.

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On évidence les fortes interactions 'multi-valley' responsable d'une dépendance anormale de la pression du niveau d'impureté A parmi le croisement entre les minimas absolu (L_1) et secondaire (Δ_1) dans le Ge sous pression hydrostatiques. On suggère deux investigations expérimentales en alternative pour donner évidence aux prévisions théoriques.