

ABSTRACT

The cooperation of free- and bound-electron — phonon scatterings are studied in detail for Sb-doped Ge in the intermediate range of donor concentrations. It has been shown that the cooperation of free- and bound-electron — phonon scatterings in the intermediate range of donor concentrations explains the anomalous variation of the phonon-conductivity ratio K_D/K_P (doped to pure host) with temperature for Sb-doped germanium which could not be explained so far by previous workers