

CONVERSION OF DIVACANCIES
AT ISOCHRONOUS ANNEALING
OF IRRADIATED *p*-Si CRYSTALS

*T.A. Pagava, L.S. Chkhartishvili, N.I. Maisuradze,
E.R. Kutelia*

Georgian Technical University,
the Republican Center of Structural Researches
(77, Kostava Str., Tbilisi 0175, Georgia;
e-mail: *tpagava@gtu.ge*)

S u m m a r y

p-Si single crystals, fabricated by the Czochralski method and characterized by the hole concentration $p = 6 \times 10^{13} \text{ cm}^{-3}$, are studied. Specimens were irradiated with 8-MeV electrons at 300 K. Irradiated crystals were isochronously annealed in the temperature interval $T_{\text{ann}} = 100 \div 500 \text{ }^\circ\text{C}$. The electrophysical parameters were measured by the Hall method in the temperature interval 77 – 300 K. The analysis of results obtained showed that, in the course of isochronous annealing (IA), the conversion of V_2 -divacancies into B_sV_2 -complexes following the reaction $B_s + V_2 \rightarrow B_sV_2$ takes place in the temperature interval 270–300 $^\circ\text{C}$. The B_sV_2 -complex is associated with the energy level of $E_v + 0.22 \text{ eV}$ and is annealed in the temperature interval 360–440 $^\circ\text{C}$.