

Microscopic Study of Proton Irradiated Epitaxial Detectors

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Thick epitaxial material (e.g. 150 μm) may be an option for application in S-LHC, therefore we are interested in the microscopic defect generation and the macroscopic parameters of this material. DLTS and TSC study of n-type pad diodes with thicknesses up to 150 μm have been performed after irradiation with 23 GeV protons and following isochronal annealing. A correlation between macroscopic electrical parameters and concentrations of corresponding defects has been observed.

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