

# Defect characterisation after electron irradiation and overview of acceptor removal in Boron doped Si

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Radiation induced acceptor removal effect leads to the performance changes (mostly degradation) in LGADs, CMOS sensors and standard p-type Si detectors. Microscopic understanding of this effect is still incomplete. In the framework of on-going acceptor removal project defect characterisation studies were performed on electron irradiated PiN diodes of 10 and 50  $\Omega$ -cm resistivity irradiated with  $5E+14$  and  $2E+14$  neq/cm<sup>2</sup>, respectively. These results will be discussed in correlation with the macroscopic changes in  $N_{eff}$  and  $I_{leak}$ . An overview of existing data for different types of irradiation, devices and material and parametrization of acceptor removal will be reviewed as well.

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