

INFLUENCE OF TIN IMPURITY
ON DEGRADATION OF CONDUCTIVITY
IN ELECTRON-IRRADIATED n -Si

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S u m m a r y

The influence of an isovalent tin impurity on the electron concentration in Cz n -Si irradiated with 1-MeV electrons has been studied both experimentally and theoretically. It is found that the Sn impurity leads to the acceleration of the conductivity degradation in electron-irradiated n Si. The effect is more pronounced in high-resistance samples, whereas the rates of electron removal from low-resistance ones are almost identical in both materials. This fact can be explained by the difference between the formation efficiency of main compensating radiation-induced defects in n -Si doped with Sn (SnV and VP complexes) and undoped n -Si (mainly, VP complexes), which depends of the concentration of phosphorus in the samples.