

FORMATION OF RADIATION-INDUCED DEFECTS
IN *n*-Si WITH LEAD AND CARBON IMPURITIES

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S u m m a r y

The processes of formation and annealing of radiation-induced defects (RDs) in *n*-Si with lead and carbon impurities have been investigated. It has been established that, after the irradiation of specimens by 1-MeV electrons, the efficiency of the formation of principal RDs, i.e. vacancy–oxygen (VO) complexes, is by 30% lower in lead-doped specimens than that in reference ones. Lead has been shown to transfer a considerable proportion of carbon atoms into an optically inactive state, thus switching them off from the processes of formation of carbon RDs C_iC_s . It has been established that the concentration of lead atoms does not exceed 10^{17} cm^{-3} in the crystals under investigation with the total atomic concentration of about 10^{18} cm^{-3} which was determined with the help of secondary ionic mass-spectrometry.