DEFECT CONCENTRATION IN CLUSTERS, CREATED BY FAST-PILE NEUTRONS IN n-Si (FZ, Cz)

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The dependence of concentration of defects on doping level for average cluster in n-Si was calculated. It was shown that in the framework of the Gossick's model the concentration of defects for the average cluster is in inverse proportion to the square of a cluster radius. One obtains the size distribution of defect clusters created by fast neutrons of WWR-M reactor, by the transformation of energy spectrum of the primary knock-on atom in n-Si (FZ, Cz). Threshold energy of defect clusters formation 4.7 keV by comparing n-Si crystals irradiated by deuterons and fast-pile neutrons was calculated.