

POSSIBILITIES OF INCREASE OF RADIATION FIRMNESS OF SEMICONDUCTOR MATERIALS

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In given article various methods of the increase of the radiation hardness of semiconductors materials such as silicon and InSb are discussed. Parameters of silicon irradiated by different types and fluences of high energy irradiation and annealed were studied by optical and electrical methods. It was shown that the increase of the silicon radiation hardness can be obtained first of all due to radiation-thermal treatments (preliminary radiation and annealing). The important results of the radiation hardness increase were received for neutron irradiated silicon, doped by germanium izovalent impurity.