

INFLUENCE OF NEUTRON IRRADIATION ON
REVERSE CURRENTS IN GALLIUM-PHOSPHIDE
LIGHT-EMITTING DIODES

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S u m m a r y

The results of electrophysical researches of gallium-phosphide (GaP) light-emitting diodes (LEDs) irradiated with fast neutrons and annealed at various temperatures are reported. The deep levels of radiation-induced defects of $E_{t1} = 1.13$ eV and $E_{t2} = 1.17$ eV have been revealed. The stage of low-temperature annealing of defects within the temperature range 50–120 °C has been studied. A gradual recovery of luminescence, caused by the reconstruction of radiation-induced damages, was observed for specimens, which were irradiated and partially annealed first, and then kept at $T = 300$ K for a long time.