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SURFACE DISTRIBUTION OF THE EMITTING INTENSITY OF GaP LIGHT-EMITTING DIODES

Microplasma breakdowns of red and green GaP diodes were studied. It has been shown that tunneling was the main component of reverse current at the beginning of the breakdown while an avalanche current prevailed at high breakdown current. Microplasma spectrum is considered to be the result of the overlapping of hot carrier emitting and recombination emitting of impurity level-valence band. 2 MeV electron irradiation leads to the decrease of microplasma number due to the radiation defect creating.

Keywords: gallium phosphide, light emitting diode, microplasma, breakdown.