

ANOMALOUS NONLINEAR
PHOTOGENERATION OF CARRIERS
ON THE SURFACE OF DIAMOND

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S u m m a r y

We find the generation of carriers in diamond polycrystalline films in the range 0.6 - 1.9 eV. With increase in the energy of photons, its dependence on the flow of photons passes from the square root dependence to the linear one. The regions of photogeneration of two types of carriers are established. For $h\nu < 1.4$ eV, carriers of one type are generated. At higher energies, two types are observed simultaneously, which explains the anomalous behaviour of photogeneration in analloyed diamond polycrystalline films, where the slope of lux-ampere characteristics approaches 1 if the wave length decreases (the concentration of carriers grows).