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Provide of planar photodiode crystals from indium antimonide resistance to shortwave irradiation

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The work is devoted to modernization of topology planar photodiode crystals (PDC) from indium antimonide in order to ensure their resistance to shortwave ($\lambda \leq 1 \mu m$) irradiation as well as experimental assessment of modernization results. It is shown that the PDC with contact systems including screens that are opaque for shortwave radiation are resistant to shortwave irradiation at working temperatures (near 77 K). The requirements to geometric parameters, location and electric relationships of screens in the PDC contact system have been identified and experimentally confirmed.

Keywords: indium antimonide, planar photodiode, contact system.

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