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The invention refers to the microphotoelectronics field, especially, to the semi-conductor photodetectors.

Photodetector contains a transparent dielectric support, a transparent contacting substrate, for example, of SnO₂, a semi-conductor photosensible substrate and the second contacting substrate. The photosensible substrate is executed of the arsenous triselenide with addition of tin having a concentration in the limits of 0,1...2,5 at. %. The second contacting substrate, for example, of the aluminum or nickel has an outlet work less than that of the photosensible substrate. The addition of the tin to the arsenous triselenide increases the photo-sensibility owing to the formation of additional capture centers for the electrons (non-basic carrier of the electric load), that decreases gaps recombination and increases therefor their drift mobility. At the photodetector illumination with a light flux of 1000 lx its photosensibility attains a value of 0,5 $\mu\text{A}/\text{cm}^2$. The photodetector may be used for measuring the non-transparent objects area or as an luxmeter.