

THE PHOTOELECTRIC EFFECT

E. Gigov, 10.04.2018

Abstract: The laws of the photoelectric effect were discovered by Stoletov and Lenard. And not everything is known yet in that area.

According to the relativists, the photoelectric effect is explained by Einstein. However the photoelectric effect laws were discovered experimentally by Stoletov (1890) and Lenard (1900). Einstein only unified these laws with Planck's theory of light (1905). Whereas Einstein's formula is approximate, because the photoelectrons never have equal speeds.

All experiments with a vacuum photocell, use an external source of electricity. But this is unnecessary, because the photocell is an electricity generator. My experiments done only with an external capacitor and a voltmeter, confirm the results of Stoletov and Lenard.

If we make a photocell with a minimum distance between the electrodes, much as wavelength of light, then the threshold frequency of the photoelectric effect will disappear, because the kinetic energy of the electrons will exceed their potential energy. This will be a kind of photodiode and even a phototransistor.