

## عنوان مقاله:

The Effect of Double Spectrum Colors Factor on Solar Cells Performance in Inorganic Solar Cells

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## خلاصه مقاله:

Solar energy is abundant in available renewable energy sources on the earth. Solar cells; SC (photoelectric cells; PV) are used to convert solar energy into electric energy. A CS cell is an electronic constituent (a p-n junction diode) that produces the electricity when sunlight is radiated on them using the photovoltaic effect phenomenon. The inorganic solar cell efficiency depends on the total electric energy produced from solar energy were initially proved at Bell Laboratory in ۱۹۵۴; from this time inorganic PV cells have been used in various and more applications. The semiconductor material is usually used for making solar cells. It can absorb the sun's radiation in the form of light, and the transmitted energy is utilized by collecting the radiant light, and converting it directly into heat or electricity. The scientist Einstein's explanation of the photoelectric effect; is that the energy of electron ejected from a photoelectric plate is influenced by frequency the inverse of the wavelength, and not by light-intensity (the amplitude), as wave-theory prophesied. The incident light with the shorter wavelength has a greater frequency of light and more energy that can be held by expelled electrons. In the same way, the PV cell is sensitive to the wavelengths and it's rejoins well in some parts of the spectrum than others to sunlight. The efficiency of SC cells is impartially low related to high solar energy radiation on the Earth and this is because numerous factors influence photovoltaic system performance. The generation, parameters of the SC cells, factors influences on SC system performance efficiency, and the effect of double spectrum colours on the solar cells performance (reliant on different wavelengths (between long, medium, and .short) with different effects on; (n-p) depilation regions) are reported in this review article

## کلمات کلیدی:

Electrical Energy, Solar Cell, Photovoltaic cell, Semiconductor, Double spectrum colours

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