

What are the applications of photoconductivity?



Some photoconductors are used in street lights, camera light meters, clock radios, nanophotonic systems, infrared detectors & photo-sensors devices with low-dimensional. These are used to switch on & off transistors. These can be used with an op-amp-based Schmitt trigger circuit.

Which photoconductor is commonly used?



The most commercially available photoconductive device is manufactured from **cadmium sulfide (CdS) CdS** (also called light-dependent resistor) whose resistance is inversely proportional to the amount of light falling on it. 25 Jul 2020

What is photoconductor unit?

The photoconductor unit is **not an independent unit that you install directly into the printer**. The unit also houses the developer cartridge in its casing, and therefore, requires that the developer cartridge be temporarily removed when you need to replace the photoconductor unit.

Who discovered photoconductivity:

Willoughby Smith (6 April 1828, in Great Yarmouth, Norfolk – 17 July 1891, in Eastbourne, Sussex) was an English electrical engineer



who discovered the photoconductivity of the element selenium. This discovery led to the invention of photoelectric cells, including those used in the earliest television systems.

Why CdS is used in photoconductivity?



Absorption of light increases electrical conductivity in a solid. In case of cadmium sulphide (CdS) photoresistor, when it is exposed to light the transition of activator electrons into the conduction band and charge exchange of traps with holes being created in the valence band causing enhancement of conductivity.

How is photoconductivity measured? ^

The photoconductivity measurements that are proposed to be made is by an experimental technique, where a radiation source in the required spectral range, the hand-chromator, an intensity modulator, a conductivity cell, instruments needed to measure the signal produced by the sample are required. , are mounted for an ...

What is the principle of photoconductive?



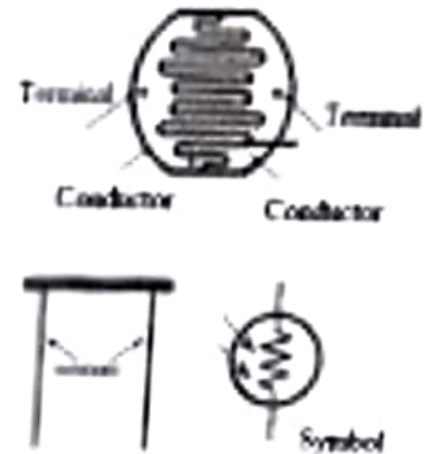
Photoconductivity is an optical and electrical phenomenon in which **a material becomes more electrically conductive owing to the absorption of electromagnetic radiation**, such as visible light, ultraviolet light, infrared light, or gamma radiation [13].

What do you mean by photoconductor?



Photoconductor or photoconductivity is an electrical and optical phenomenon in which materials become more conductive due to absorption of electromagnetic radiation (such as infrared light, ultraviolet light, visible light, or gamma radiation).

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The inner photoelectric effect forms the basis of a photoconductive cell. Hence, when light falls on a cell, the resistance decreases. Consequently, the current starts flowing in that of an external circuit. Also, the change in current is not in proportion to the change in the intensity of light.

photoconductive cell?

A photoconductive cell is a two-terminal semiconductor device. The terminal resistance of such cells varies with the intensity of the incident light. Therefore it is often referred to as a photo-resistive device. The most commonly used photoconductive materials are cadmium sulfide (CdS) and cadmium selenide (CdSe).

What are the applications of photoconductivity?



Some photodetector applications in which photoresistors are often used include camera light meters, street lights, clock radios, infrared detectors, nanophotonic systems and low-dimensional photo-sensors devices.