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photoconductive detector

In a photoconductive detector an electric potential is applied across the absorbing region and causes a current to flow in proportion to the irradiance if the photon energy exceeds the energy gap between the valence and the conduction band. Depending on their spectral responsivity function, photoconductive detectors are divided into photoconductive detectors for the visible wavelength range e.g. cadmium sulfide or CdS photoconductive detectors, photoconductive detectors for the near infrared wavelength range e.g. lead sulfide or PbS photoconductive detectors, photoconductive detectors for the infrared wavelength range e.g. silicon doped with arsenide or Si:As photoconductive detectors, and the mercury-cadmium-telluride or HgCdTe photoconductive detector.

Source:
PAC, 1995, *67*, 1745 *(Nomenclature, symbols, units and their usage in spectrochemical analysis-XI. Detection of radiation (IUPAC Recommendations 1995))* on page 1754

