

## **MODELING OF PHOTO-DETECTOR FOR THE ARTIFICIAL RETINAL SYSTEM**

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### **Abstract**

The photo-detection is important in all the image sensory system. The choice of photo-detection is of vital importance for application of varying dynamic range. The photo-detection mainly deals with the light it receives and generating the voltage required. At the input of any photo-detector system, a converging lens is the prime. This paper discussed the mathematical model for the lateral photodiode as photo-detector for the real time imaging or Artificial Retinal System (ARS). This analysis gives the result enabling the utility of photo-diode as photo-detector. The responsivity and Quantum Efficiency (QE) has been analyzed to study the effect of the wide wavelength. The careful modeling of this will open the new aspects for the application of real time imaging, robotics, surveillance etc.

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