

Avalanche photodiode and a method for sensing photons (Technion)

code: ENG-1326

Highly demanding photonic applications require the acquisition of images at very low light-level conditions and at high speed. Only Geiger-mode CMOS imagers in which the sensor in each pixel is a single photon avalanche photodiode (SPAD) may meet the requirements for exceptional time resolution and ultimate optical sensitivity. However, despite significant progress, Geiger-mode CMOS imagers are still commercially unavailable. Conventional designs are incapable of achieving high fill factor, high PDE, and low DCR. This innovative design utilizes a completely new method to achieve all of the desired properties for this type of imagery.

Contact for more information:

T3 Team , +972-4-8294853

T - Technion Technology Transfer
Technion City, Senate Bldg., Haifa 32000, Israel
Tel. 972-4-829-4851; 972-8325-375
Fax. 972-4-832-0845