

## **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:**

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