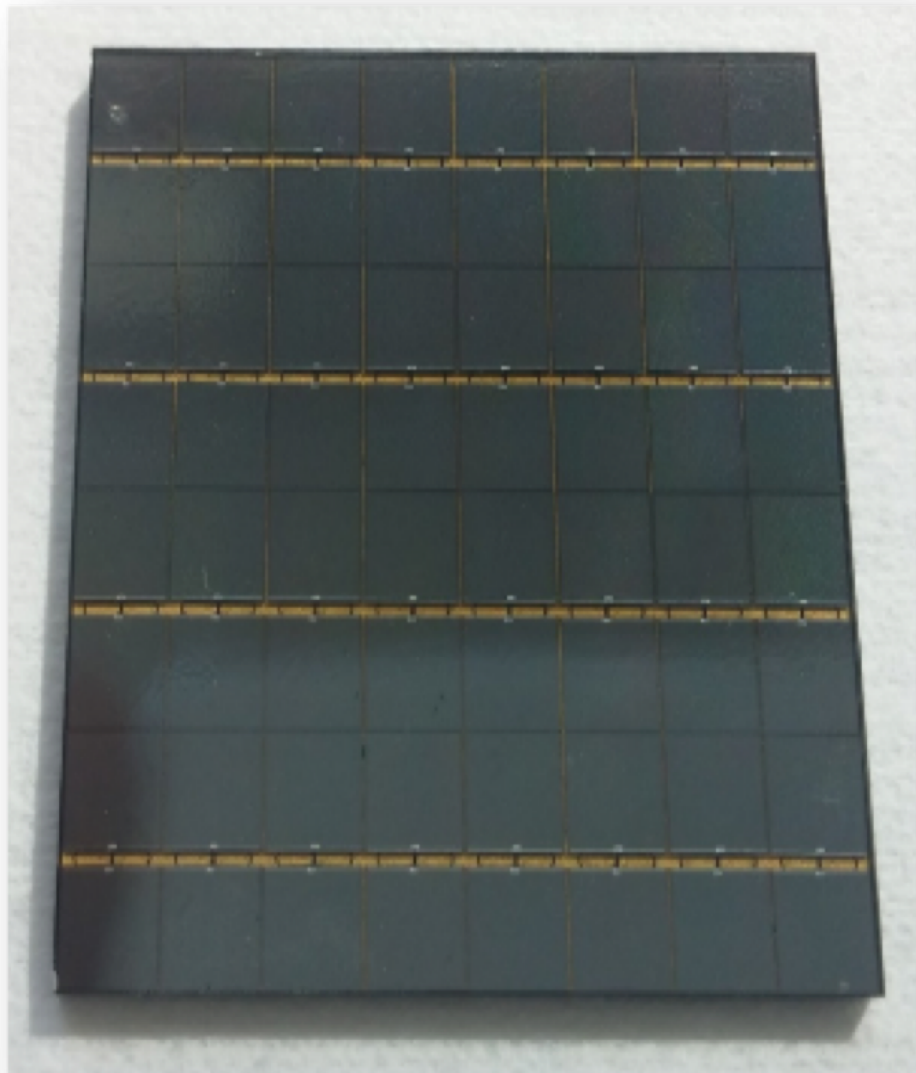


## CMOS Silicon Photomultipliers new



*Device for Radiation Detection*

### RIFERIMENTI E LINK

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### DESCRIPTION

The silicon photomultiplier is a single-photon light sensor with characteristics similar to a photomultiplier tube but with the advantages of a solid-state device (compactness, ruggedness, cost...). FBK has developed different implementations, according to the application, which are at different TRL stages.

### SPECIFICATIONS

Main parameters optimized:

- peak sensitivity (Green, UV, VUV)
- dynamic range (400 to 40000 SPADs/mm<sup>2</sup>)
- layout (1x1 to 10x10mm<sup>2</sup>)
- array configuration (different bonding schemes with high fill factor)

### ADVANTAGES & APPLICATIONS

- Biomedical
- physics experiments
- analytical instrumentation
- full custom technology optimized for specific application.

### STATUS

- TRL 5 - technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- Several Patent pending