

# First Laureate Applied Research

◆ **Project title:** Technology of Design and Fabrication of FPA Detectors

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## **Abstract:**

The most fundamental part of an Imaging System is its Detector. The role of a detector is conversion of an optical signal into electrical signal. To convert an optical picture into electrical signals for each Pixel, an optical detector is required. Hence for a two dimensional picture an Array of optical Detectors is needed along side a semiconductor processing chip. The two dimensional array are fixed at the focal Plane of the lens system, (focal Plane Array-FPA).

In this Project, using semiconductor fabrication technology, design and fabrication of optical detector Arrays have been performed and completed locally. All the design, engineering, fabrication and testing process of the detectors have been achieved through native generic technologies in Iran.