

ZEELTA OY

HR-GaAs:Cr Technology Residence

TRUE COLOR X-RAY

What for?

- To facilitate research, wise and timely decisions in:
 - Investigation of the structure of the matter
 - Health care
 - Security/safety
 - Material research
 - Mining and processing of fossil raw materials
 - ... and many more
- It is a leap-frog game changer in X-ray methods, like B/W TV and photography were revolutionized by **COLOR**

What is HR-GaAs:Cr?

- It is High Resistivity GaAs doped with Chromium, a room temperature X-ray sensing material
- Our nickname for this sensing material is “TOP”
- There are other sensing materials on the market, CdTe, CdZnTe (CZT), etc.
- TOP provides competitive performance, and
 - Order of magnitude cheaper
 - Scalable production processes
 - Better response uniformity
- TOP is a material with the best price/performance ratio for the energy dispersive photon counting X-ray sensing

Where is TOP today?

Joint Institute for Nuclear Research, Dubna, Russia

DESY, Hamburg, Germany

Rutherford Appleton Laboratory, Didcot, UK

FMF, Albert-Ludwigs-University, Freiburg, Germany

Karlsruhe Institute of Technology, Karlsruhe, Germany

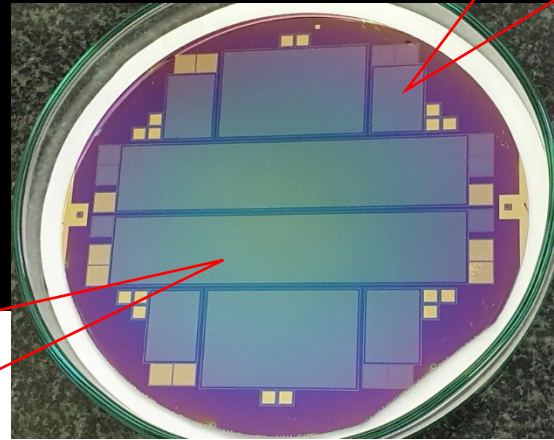
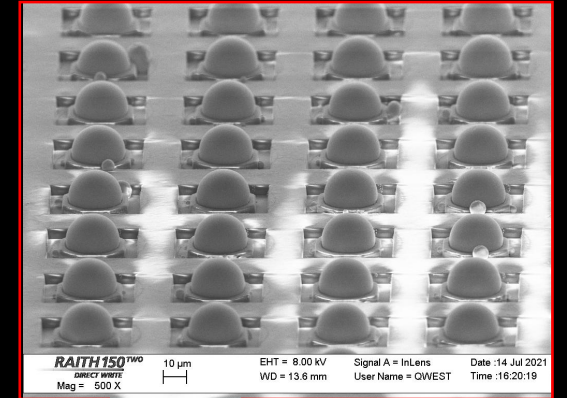
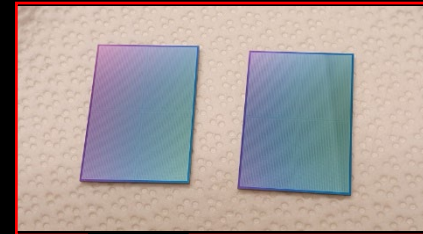
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ESRF, Grenoble, France

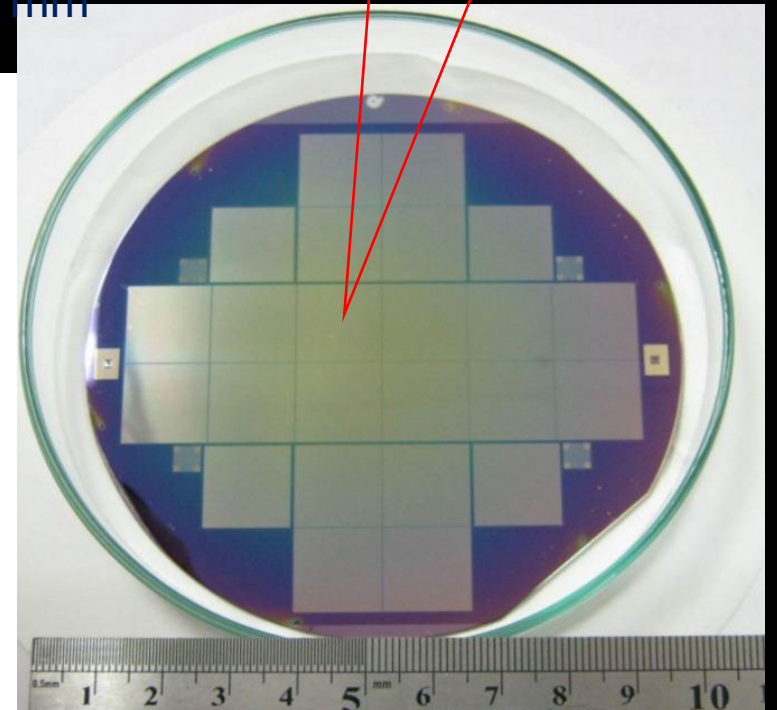
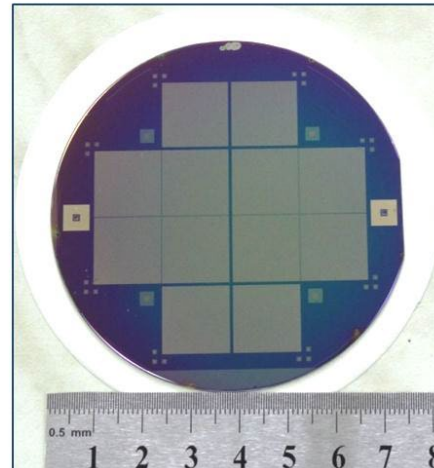
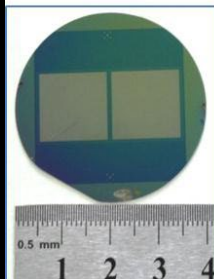
Cornell University, USA

LANL, USA

Stanford University, USA



Ø 76 mm



Why ZEELTA?

- Decades of developments of the sensing material, technology, detectors and imaging systems
- IP ownership on the unique technology of the **TOP** sensing material

Who is ZEELTA?

- Developer and the owner of the IP and technology to produce the unique sensing material – TOP
- Founders are worldwide recognized and well-known physicists, business developers, technology investors and enthusiasts

ZEELTA Targets

- Make TOP available worldwide
- Setting up own research and experimental production facility of the TOP sensing material in EU
- Early revenue stream from selling TOP to existing customers
- Prepare A Round of \$5...7M
- Mature TOP technology and production processes
- Register patents
- Potentially B Round of \$20...25M to set up industrial scale production facilities
- Ultimately sell packaged IP to a tier one player

ZEELTA and DESY

- your ability to produce GaAs sensors of which parameters (size, resistivity, segmented pads)
 - *What are DESY needs for this material? In the same coordinates.*
- potential read-out strips on sensor, to feed the signals to the edge of the sensors
 - *Are there technical requirements wrt geometry, lifetime, constraints, etc.?*
- what are delivery times?
 - Depends on expected performance of the sensor and quantities/schedules
- and sure, any other technological details you may have in mind.
 - New technology process is being developed right now
 - It is not too late to provide your requirements