Development of the novel MBE materials for III-V IR optoelectronics

**Novel Metamorphic Bulk InAsSb**

New class of the semiconductor heterostructures for infrared photonics beyond 10µm

In-situ control of crystal growth at the subnanometer scale

**Novel Metamorphic periodic heterostructures operating up to 20 µm wavelength**

Changing the period of modulation, in InAsSb/InAsSb heterostructures, from 2.3 to 5.5 nm allows to reduce effective bangap from 100 to 60meV