

MOCVD T2SLs

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T2SLs is relatively new concept in III-V semiconductors, which gained a lot of interest due to prospects of being able to offer III-V based IR detectors, which would replace HgCdTe for LWIR and MWIR range. Usually T2SLs are grown in MBE, since it is much easier to get good quality antimonides in MBE. Over the recent years there are as well some results, that demonstrate capability of MOCVD technology for growth of quality T2SLs epitaxial structures.

Inspired by <https://doi.org/10.1063/1.5115269> we wanted to have quick stab at testing results shared in this paper.

Photin complete EIT Manufacturing EVO-R project dedicated to purchase, transfer, and set-up of Aixtron Aix-200RF MOCVD reactor from Ulm University to Photin facility.



This is 3rd reactor purchase for Photin. Acquisition of such well maintained, fully documented, and operational reactor resulted in synergy effects and rapid acceleration of works on Aixtron Aix-200/4 and Aixtron Aix 2400 G1 reactors standing in Photin facility. All Photin reactors are based on VME technology known for

ruggedness and reliability.

The Aix-200RF reactor was operational 1 week after transfer, and extensively tested on provisional water cooling and nitrogen supply. Facility works are in progress with outlook to grow first wafers in Q2 of 2022.

Inquiries for growth of 2” wafers on GaSb, GaAs, and InP could be sent to kk{sign}photin.eu.

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