

# NAVOLCHI

Victor Calzadilla  
March 2014



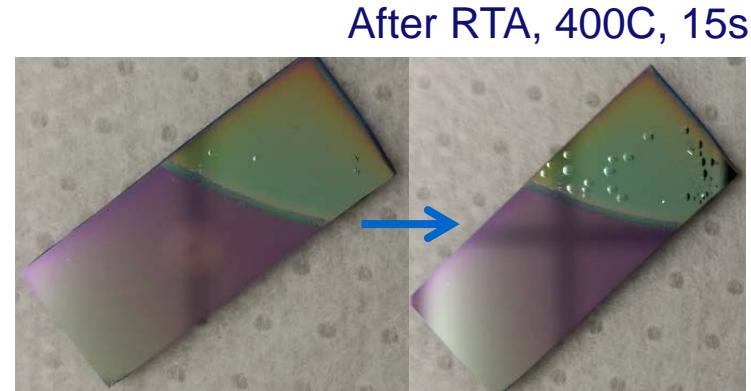
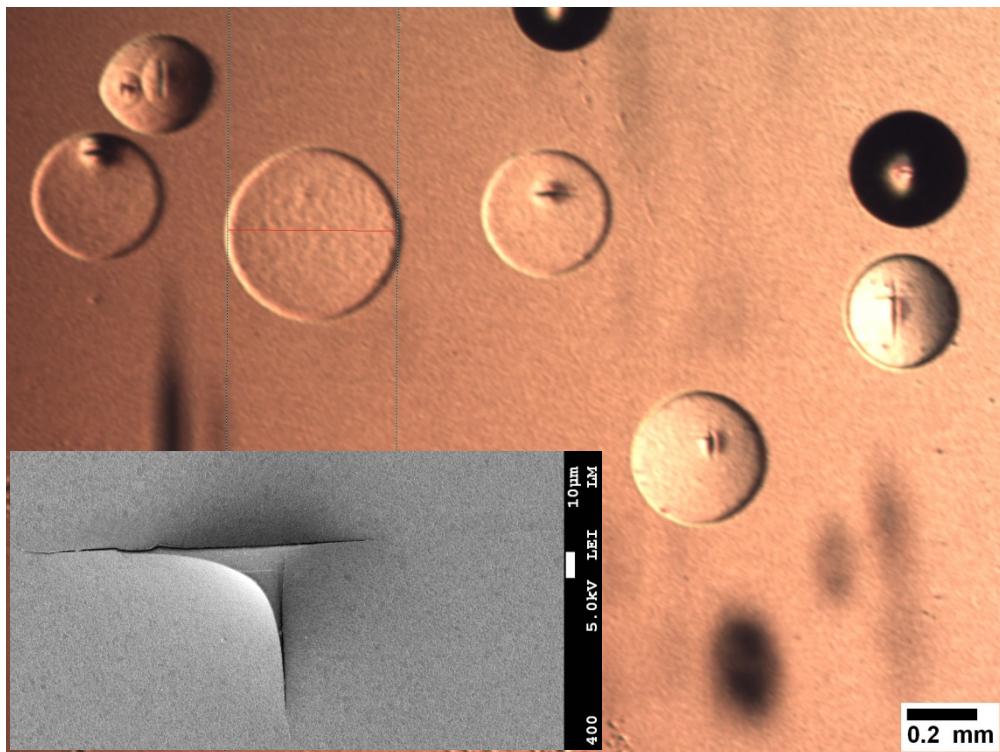
Technische Universiteit  
Eindhoven  
University of Technology

Where innovation starts



# Investigation of outgassing in III-V membranes

- For  $T \geq 300C$ 
  - Defects (tens/hundreds of um)

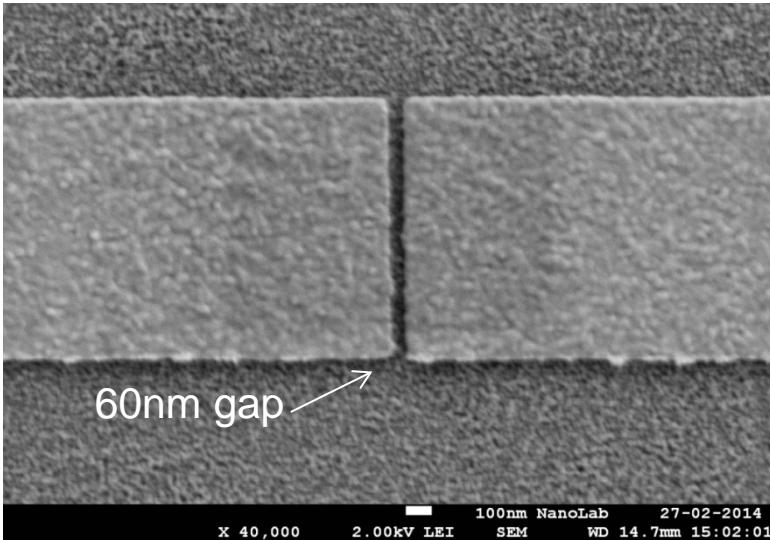


Layer stack:  
Ag(300nm)  
Ge(2nm)  
SiOx(200nm)  
InP(270nm)  
Bonding  
Si-substrate

- What follows? Experiments of bondings done at high temperatures (350C)

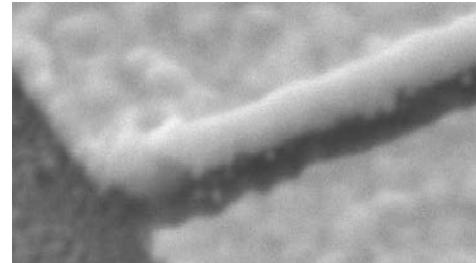
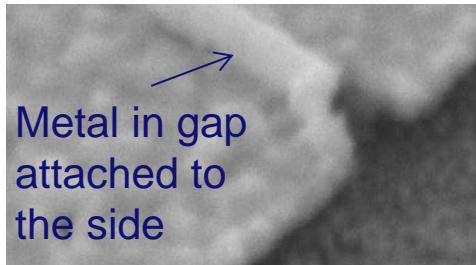
# Nanogap for Valencia

- Dose test



- Achieved:
  - Line width = 100nm – 1um
  - Gap: 60nm - 220nm
  - Thickness = 50nm

- 1<sup>st</sup> attempt in real sample/pattern



- Can Valencia send more samples?