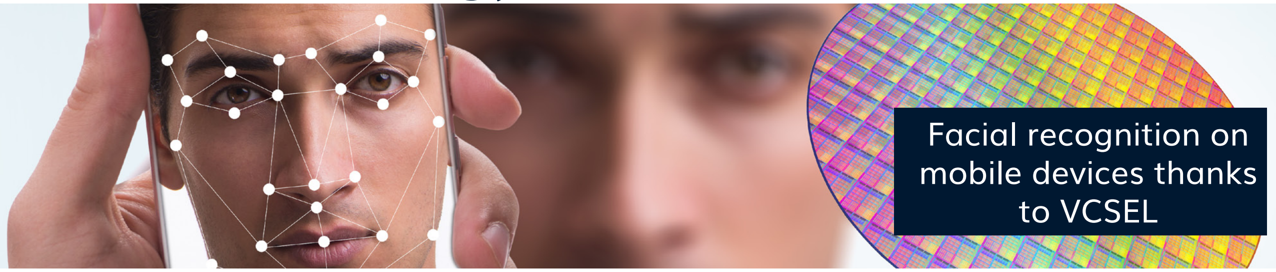
FRT THE ART OF METROLOGY™

METROLOGY TUESDAY

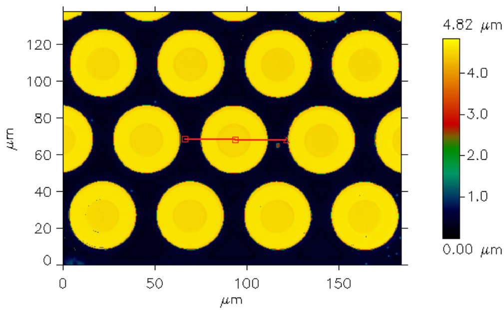
# Vertical Cavity Surface Emitting Laser - VCSEL technology takes off



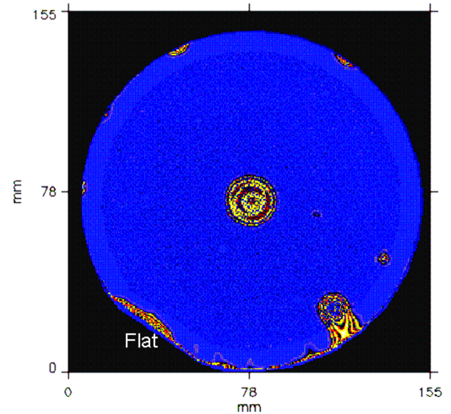

**Fully automated measurement and determination of VCSEL parameters with one-button operation**

- wafer thickness, bow, stress, defect and haze mapping in epi process control
- critical dimensions (CD) and etching depth
- thickness of dielectric layers, step height and width of metallizations
- taper of bond wafers and defect inspection in adhesive layers, wafer parameter after grinding
- reflection spectra of Bragg reflectors/ mirror (DBRs)
- fully integrated SECS/GEM interface and fully automated wafer handling system

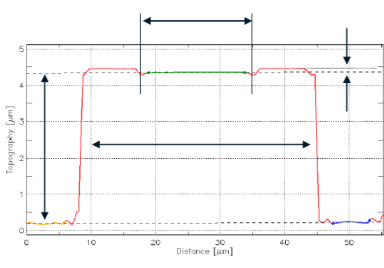
and much more...



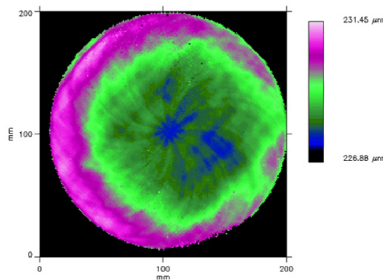

3D mesa and ring contact measu-rement of a VCSEL array



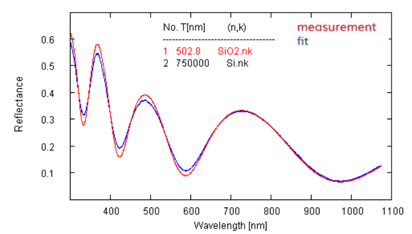

Detection of voids in the bond interface



Mesa and ring contact height, width and aperture diameter



Wafer thickness after grinding




Film thickness analysis of a dielectric layer on wafer using fit algorithm

## Example for technical solution

**MicroProf® FS** - fully automatic wafer metrology tool