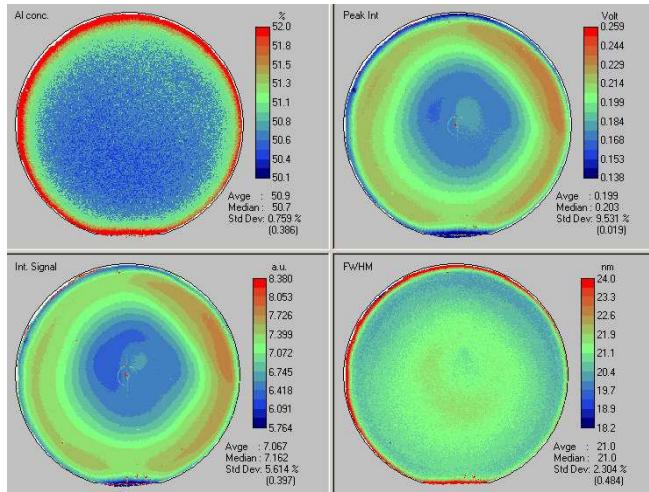


Customised epitaxy InAlGaAs structures on GaAs suitable for tests and devices



Photoluminescence map analysis of $Al_{0.5}Ga_{0.5}As$ layer on 2-inch GaAs substrate.

GaAs layer on GaAs substrate

- Diameter: 2"
- Thickness uniformity within 90% of the wafer radius: $\pm 2\%$
- Carrier Concentration for undoped GaAs layer: $10^{14}/cm^3$
- Carrier Concentration for n-type GaAs layer: $5 \cdot 10^{18}/cm^3$
- Carrier Concentration for p-type GaAs layer: $4 \cdot 10^{19}/cm^3$
- Carrier mobility at $n=2 \cdot 10^{17} (cm^2/Vs)$
- Carrier concentration uniformity within 90% of the wafer radius: $\pm 10\%$

Other InAlGaAs epitaxy structures on GaAs

- InGaAsP/GaAs (typically lattice-matched)
- AlAs/GaAs
- InAs/GaAs quantum dots
- GaAsP (typically strained)
- InGaAlP (typically lattice-matched)
- InGaP/GaAs (typically lattice-matched)
- AlGaAs/GaAs QW edge emitting lasers (680 – 870nm)
- AlGaAs/GaAs VCSELs
- AlGaAs/GaAs HEMTs
- AlGaAs/GaAs varactors
- GaAsP/GaAs strained QW edge emitting lasers
- InGaAsP/GaAs QW lasers 808nm
- InGaAs/AlGaAs/GaAs strained QW lasers 800 – 1000nm
- InGaAs/GaAs and InAs/GaAs QD lasers
- Diluted nitrides structures (under development)
- AlGaAs/GaAs passive waveguides