

Now available from SVT Associates

## High Quality III-Nitride Wafers by MBE

- Custom epitaxial thin films and structures on sapphire, SiC, and Si substrates.
- Low defect insulating or highly n-doped or p-doped GaN templates.
- InGaN and AlGaN films in a wide range of compositions and doping levels.
- Ultrathin and hyper-abrupt heterostructures (e.g. AlN/GaN, SLs and DBRs)
- Very high performance device structures (HEMTs, HBTs, UV detectors, etc.)
- Wide range of growth capabilities, including epitaxial growth at very low temperatures, delta doping, and uniform growth on large diameter wafers.

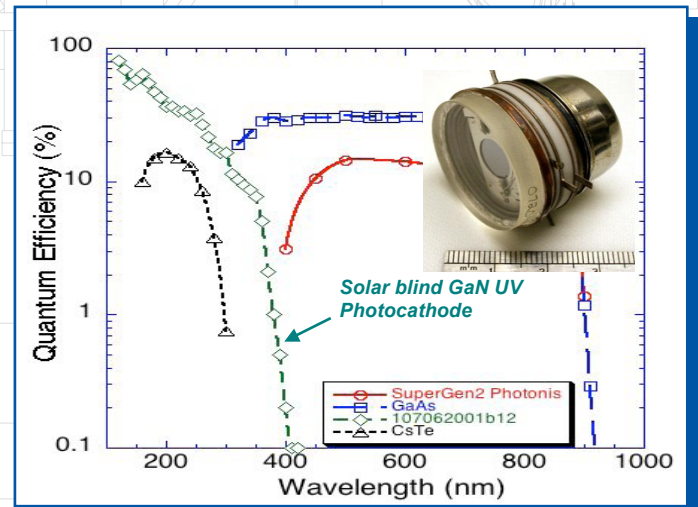
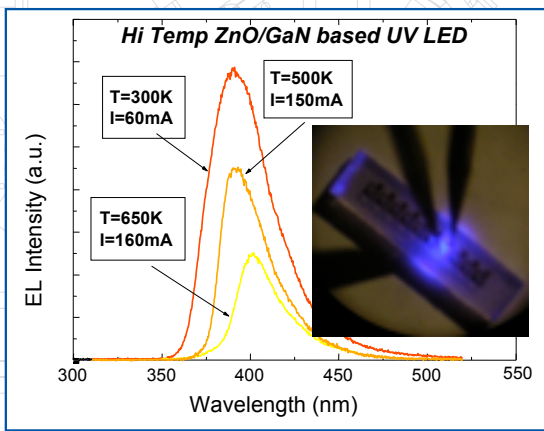
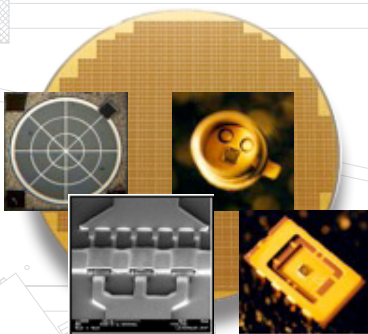
### EXAMPLE STRUCTURES:

- AlGaN/GaN and AlN/GaN HEMTs, UV photocathodes, photodetectors, and LEDs.

### III-Nitride HEMT Wafers Characteristics\*

Device Parameter	Measured Values
Substrate ( $\text{Al}_2\text{O}_3$ , SiC, Si)	Up to 4" diameter
GaN buffer resistivity	$\rho > 10^9 \Omega\text{-cm}$
GaN background doping	$N_D < 10^{15} \text{cm}^{-3}$
2DEG mobility at 300K	$\mu > 1800 \text{cm}^2/\text{Vs}$
2DEG sheet resistivity	$\rho < 150 \Omega/\text{Sq.}$
Thickness uniformity	$< 3\%$
Al composition uniformity	$< 5\%$

\* HEMT characteristics depend on the active layer



For more information or a quote, call:  
952-934-2100 or email: [sales@svta.com](mailto:sales@svta.com)