DEPOSITION SYSTEMS FOR COMPOUND SEMICONDUCTORS AIX G5+ C Planetary Reactor<sup>®</sup> for GaN on 150/200 mm Si

-121



944

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# Single wafer performance with batch reactor benefits **AIX G5+ C Cluster**

## Increase your productivity and performance

- Chosen by the best in the industry
- Highest throughput
- Lowest Cost of Ownership
- Highest yield performance
- 1<sup>st</sup> fully automated MOCVD platform with Cl<sub>2</sub> in-situ cleaning and cassette-to-cassette wafer handler

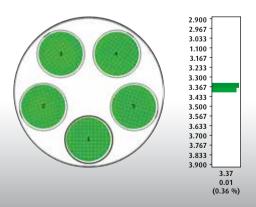
#### AIX G5+ C characteristics

- Unique axis symmetric wafer performance like Si single wafer reactor
  - Wafer bow
  - Thickness, composition, concentration
  - Device yield
- Warm ceiling results in lowest heat flux through wafer
  - Smallest wafer bow by vertical temperature gradient
  - Enabling standard Si wafer thickness
- Customized temperature optimization by recess shaping

### Cassette-to-Cassette Wafer Handler

#### Single Wafer Performance with Batch Reactor Cost Benefit

GaN on Si HEMT thickness uniformity 0.44 % standard deviation without edge exclusion. Mean thickness 3.37 µm.









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