

# Accelerate Your Research

Flexible Nitride MOCVD with Advanced Technology Capabilities



## SR4000HT Series

- Based on Proven and Reliable SR Series Design
- Tailored for Research Environments, with Flexibility to Operate in Production Mode
- Optional High Temperature MO Supply System Functionality for Low Vapor Pressure MO Sources (e.g., Sc, Y, Nb)

# Wide Process Window and Compatibility with a Variety of MO Precursors

## Advantages

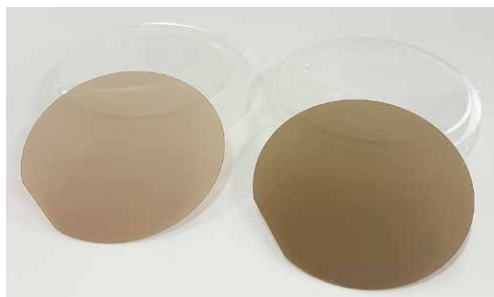
- High Growth Rates with Excellent Uniformity
- High Degree of Doping and Background Concentration Control
- Enables Alloying of Sc and Other Elements with AlN for High Carrier Density HEMTs
- Allows for Rare Earth Element Doping in GaN for Wider Range of Emission Wavelengths
- Suitable for Mass Production

## Features

- Suitable for a variety of applications.
- GaN, AlN, AlGaIn, InGaIn, and related low vapor pressure materials.
- Possibility of collaborations with universities or industrial partners.

## Optional

- (\*-LV) Low vapor pressure precursor supply
- In-situ monitoring systems: EpiTT, EpiCurveTT, others on request
- Gas concentration monitors for precise control of MO precursors
- Auto-loading system for susceptors (\*only for SR4000HT)



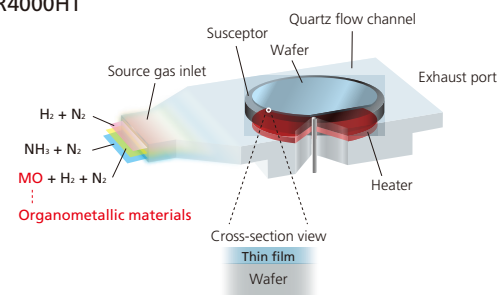
2-inch AlN epi-wafers



SR4000HT-RR



SR4000HT



Concept of SR-series MOCVD reactor

## Specifications

	SR4000HT	SR4000HT-RR
Reactor type	Face up, horizontal flow with rotation	
Configuration	2" x3 or 4" x1	
Heating system	Two (2) zone heaters, up to 1350 °C	
Gas nozzles	Three (3) laminar flow horizontals (Triple injection)	
Growth pressure	10 kPa up to 100 kPa	
Size	L6200, W1200, H2200 Four (4) cabinets	L4700, W1200, H1950 Three (3) cabinets
Sources	Eight (8) metalorganic Two (2) hydride lines	

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