NTT AT

NTT-AT provides GaN epitaxial wafers with high mobility for electronic devices

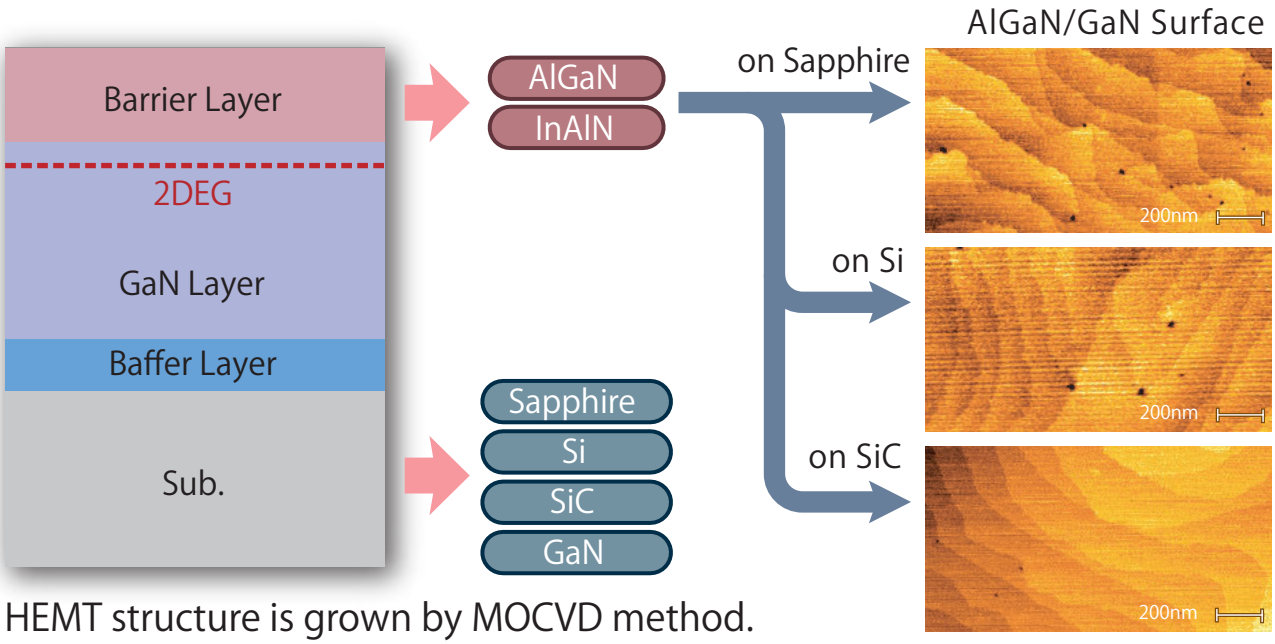
GaN EPITAXIAL WAFERS



- GaN epitaxial wafers using various substrates (Sapphire, Si, SiC, GaN)
- Able to provide large size substrate (up-to 8 inch with Si substrate)
- Widely accepted by the electronic device market
- Novel fabrication technique based on the cutting-edge technologies of NTT Laboratories

Epi	Size	Substrate
AlGaN/GaN HEMT Epi InAlN/GaN HEMT Epi	2~4 inch	Sapphire
	4~8 inch	Si
	4~6 inch	SiC
	2~4 inch	GaN

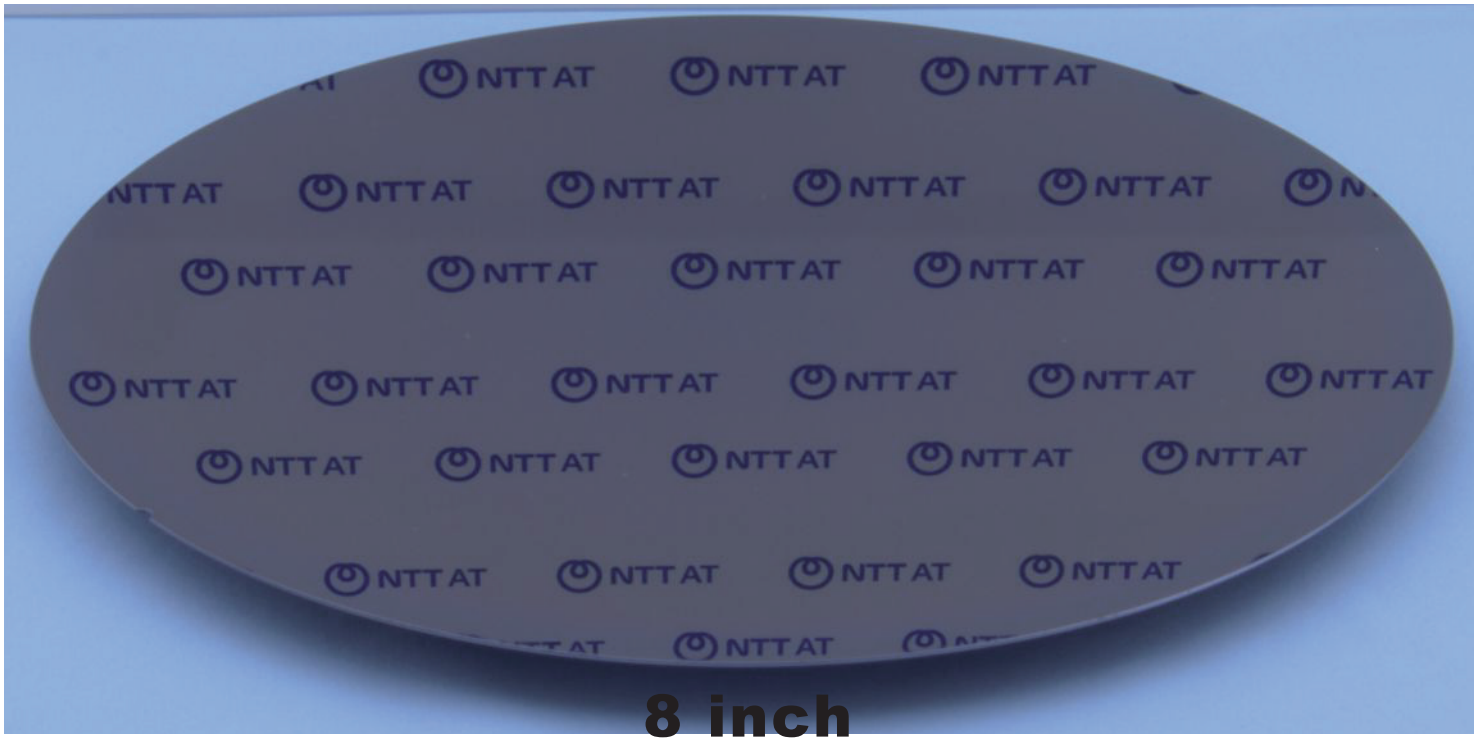
Layer Structure and AFM Images of HEMT epi surface



HEMT structure is grown by MOCVD method.

Now, 8 inch GaN on Si available

GaN Epitaxial Wafers



Standard fabrication process

1. Formulate crystal growth conditions
2. Substrate cleaning
3. Expitaxial growth
4. Non destructive inspection of crystal quality by X-ray diffraction

Other optional inspection services are available to meet your needs

- Thickness uniformity
- Composition uniformity
- Sheet resistance
- Mobility
- AFM
- Surface particle inspection

- ▸ NTT-AT is pleased to “customize” our GaN epi-wafer according to your needs.
- ▸ Please let us know your required layer structure and quantity.
  For any further questions, please feel free to contact us.

Notes:
This content may be subject to change without notice.
This product has been classified under Item 7(18) in the Export Control Order Attachment List 1 by Japan's Ministry of Economy, Trade and Industry (METI), and a license from METI is required for its export.

For more information, please contact

NTT ADVANCED TECHNOLOGY CORPORATION

https://keytech.ntt-at.com/en/epi/prd_1002.html