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

### GaN HEMT Epi Products

<table>
<thead>
<tr>
<th>Epi</th>
<th>Size</th>
<th>Substrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlGaN/GaN HEMT Epi</td>
<td>2~3 inch</td>
<td>Sapphire</td>
</tr>
<tr>
<td>InAlN/GaN HEMT Epi</td>
<td>4~8 inch</td>
<td>Si</td>
</tr>
<tr>
<td></td>
<td>4~6 inch</td>
<td>SiC</td>
</tr>
<tr>
<td></td>
<td>2~4 inch</td>
<td>GaN</td>
</tr>
</tbody>
</table>

### 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. Epitaxial 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