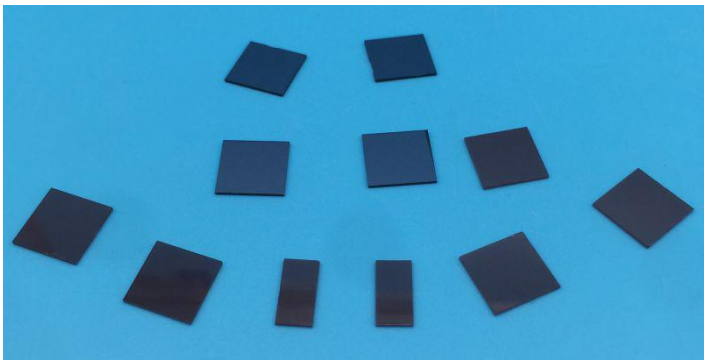
Neodymium Gallate($NdGaO_3$)

Neodymium Gallate($NdGaO_3$)is mainly used as a substrate for epitaxial film growth of high-temperature superconductors (such as YBCO) and magnetic materials. Because the lattice mismatch between $NdGaO_3$ and YBCO is very small (~0.27%), and there is no structural phase change, a good quality film can be epitaxially grown on the $NdGaO_3$ substrate.



PARAMETERS

Parameters	
Crystal Structure	Orthogonal
Lattice Constant	a=5.43 Å, b=5.50 Å, c=7.71 Å
Melting point	1600℃
Density	7.57 (g/cm^3)
Dielectric Constants	25
Growth Method	Czochralski
Dimension	10x3mm，10x5mm，10x10mm，15x15mm，20x15mm，20x20mm
Thickness	0.5mm，1.0mm
Polishing	One side or two sides
Orientation	＜100＞ ＜110＞ ＜111＞
Crystal Plane Orientation Accuracy	±0.5°
Edge Orientation Accuracy	2°（Special requirements can reach within 1°）
Bevel Wafer	According to specific requirements, wafers with edge-oriented crystal planes inclined at a specific angle (inclination angle 1°-45°) can be processed.
Surface Roughness	Ra≤5Å（5×5μm）
Package	Class 100 clean bag, Class 1000 super clean room