



Lithium Niobate

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Single Crystal Menu

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Calcium Fluoride

Barium Fluoride

Lithium Fluoride

Silicon Carbide

Silicon on Sapphire

Silicon Windows

Germanium

Magnesium Fluoride

Lithium Niobate

Lithium niobate - LiNbO_3 is a useful material for optoelectronics. Many technologies are based on this material which has unique piezo-electric, optical and photoelastic properties while exhibiting mechanical and chemical stability.

The combination of excellent electro-optical, acousto-optical and non linear optical properties make an attractive host material for application in integrated optics.

Optical Grade

Available up to 6" diameter, single crystal optical grade material has been developed as a next generation material. Reduced impurity levels and development of high damage threshold material through Magnesium doping, has resulted in sub-grain boundary free wafers. The main applications are in optical modulation, wavelength conversion for SHG lasers, PPLN and more.

Nd:MgLN, Er:LN and Fe:LN have been added for upcoming applications in holographic memories, devices for optic communications and next generation laser systems.

Other specifications can be provided

Doped wafers: Er:LN, Zn:LN and Fe:LN

Saw Applications

The most commonly used orientations are YZ-cut and 128° -cut most suitable for applications in television transmission and reception signal processing.

With the increased interest in high frequency telecommunications signal processing for EGSM, AMPS, 3G, Bluetooth and 802.11b, there has emerged a significant interest in rotated cuts where the velocity of the acoustic wave is high. Accordingly 171° and 106° doubly rotated wafers have shown an increased demand.



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