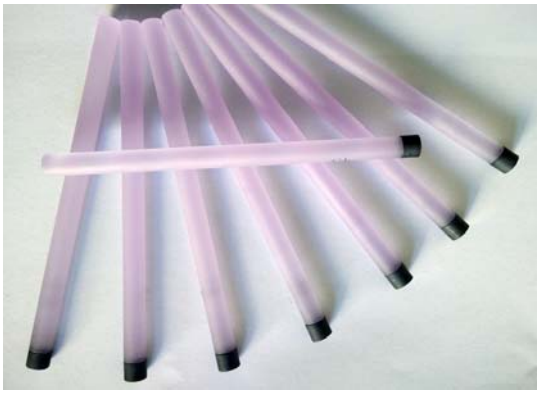
NdYAG Crystal



NdYAG crystal is the best of the rare earth garnet materials that are characterized by four-level system which permits low threshold operation both in pulsed and CW mode. It is the most mature and widely used solid-state laser material adopted by R&D, medical, industrial and military customers. Its properties are a good compromise between the strengths and weaknesses of its competition. Nd:YAG crystals are used in all types of solid-state lasers systems, e.g. frequency-doubled continuous wave laser, high-energy Q-switched pulse laser, etc. Compared with other laser crystals, its fluorescence lifetime is twice that of Nd:YVO4, and thermal conductivity is also better.

we specialize in the growth and fabrication of high-purity low-loss rare-earth doped YAG laser materials. LASERTEC's research has led to numerous discoveries resulting in laser materials that have demonstrated increased efficiency, increased output power, increased damage resistance, reduced thermal lensing, higher brightness, and higher TEM00 output. We offer custom manufacturing of laser rods, slabs, discs, passive q-switches & YAG optics, for your high volume production quantities, or low volume development efforts.

Advantages:

1. High Gain, High Efficiency, Low Threshold
2. High Optical Quality and low Loss at 1064 nm
3. Good Mechanical and Thermal Properties
4. Easy to operate with TEM00 mode (Q-Switch, pulsed, CW)

Specification of NdYAG

Orientation:	<111> or <100> within 5°
Dimensional Tolerance:	Diameter +/-0.1mm ,Length+/-0.5mm
Wavefront Distortion:	<λ/8 at 633nm per inch
Surface Quality:	20/10
Parallelism:	< 10 arc seconds
Perpendicularity:	< 5 arc minutes
Surface Flatness:	<λ/10 at 633nm
Clear Aperture:	Central 95%
Chamfer:	0.15x45°
Coating:	1.AR@1064nm R<0.2% 2.AR@1064nm R< 0.2% & HT@808nm T>95% 3.HR@1064nm R>99.8% & HT@808nm T>95% 4.HR@1064nm R>99.8%

Lasertec

Standard Products

Part No	Diameter(mm)	Length(mm)	Doping	Cut angle	Coating
NdYAG-4080	4	80	0.6%	<111>	AR/AR1064 nm
NdYAG-4100	4	100	1.1%	<111>	AR/AR1064 nm
NdYAG-4110	4	110	1.1%	<111>	AR/AR1064 nm
NdYAG-5080	5	80	1.1%	<111>	AR/AR1064 nm
NdYAG-5100	5	100	1.1%	<111>	AR/AR1064 nm
NdYAG-5110	5	110	1.1%	<111>	AR/AR1064 nm
NdYAG-5115	5	115	1.1%	<111>	AR/AR1064 nm
NdYAG-5120	5	120	1.1%	<111>	AR/AR1064 nm
NdYAG-6100	6	100	1.1%	<111>	AR/AR1064 nm
NdYAG-6110	6	110	1.1%	<111>	AR/AR1064 nm
NdYAG-6115	6	115	1.1%	<111>	AR/AR1064 nm
NdYAG-6120	6	120	1.1%	<111>	AR/AR1064 nm
NdYAG-7100	7	100	1.1%	<111>	AR/AR1064 nm
NdYAG-7115	7	115	1.1%	<111>	AR/AR1064 nm
NdYAG-7145	7	145	1.1%	<111>	AR/AR1064 nm
NdYAG-8080	8	80	1.1%	<111>	AR/AR1064 nm
NdYAG-8100	8	100	1.1%	<111>	AR/AR1064 nm
NdYAG-8110	8	110	1.1%	<111>	AR/AR1064 nm
NdYAG-8165	8	165	1.1%	<111>	AR/AR1064 nm
NdYAG-8185	8	185	1.1%	<111>	AR/AR1064 nm
NdYAG-9120	9	120	1.1%	<111>	AR/AR1064 nm
NdYAG-9150	9	150	1.1%	<111>	AR/AR1064 nm
NdYAG-127120	12.7	120	1.1%	<111>	AR/AR1064 nm