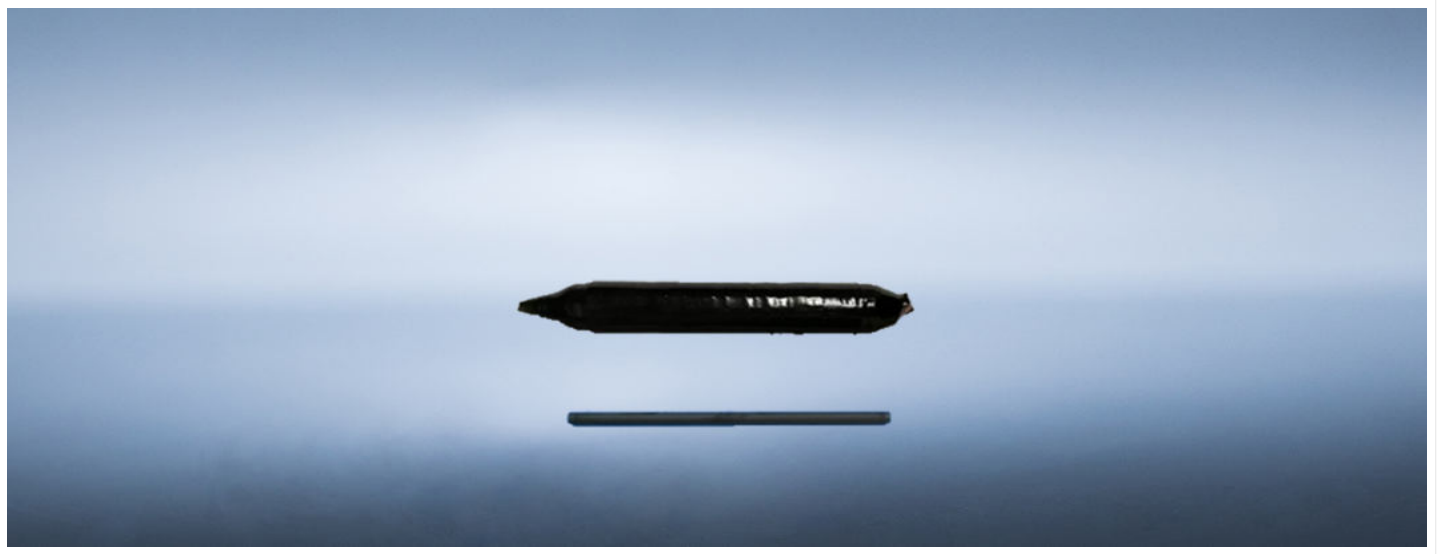


Cr,Er:YAG



DESCRIPTION

CRYLINK's Cr, Er:YAG product is a kind of laser crystal product with excellent comprehensive performance. It is widely used in laser medical cosmetology, xenon lamp pumping and other fields. The product has the characteristics of high single pulse energy, good optical quality and low absorption loss. Can be used in mid-infrared laser, xenon lamp pump laser, 2940nm laser products.

FEATURES

- High slope effect
- High optical quality
- Low absorption loss
- High thermal conductivity
- Higher single pulse energy
- Suitable for xenon pumping
- Higher electro-optical effect
- Excellent radiation-resistant materials

APPLICATIONS

- 2940nm laser
- Laser medical beauty
- Xenon lamp pumping
- Medium-infrared laser
- Xenon light Pump laser



Cr,Er:YAG

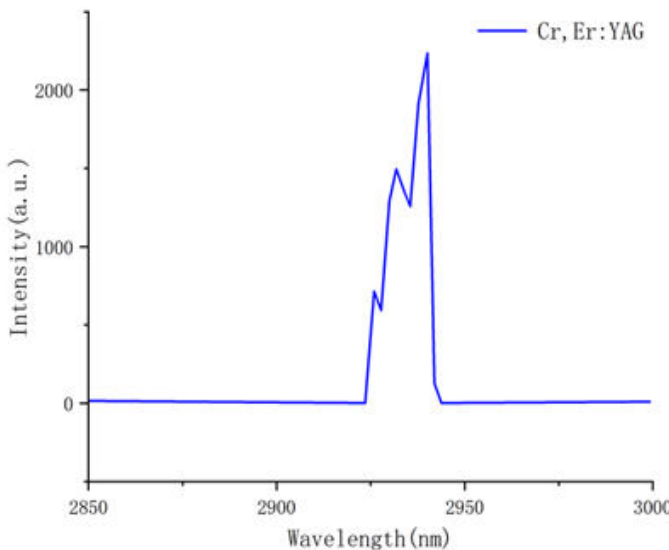
MATERIAL SPECIFICATIONS

Directional	[100] or [100] $\leq \pm 0.5$.
Parallelity	10"
Perpendicularity	5'
Surface Finish	44474
Wavefront Distortion	<math>< \lambda/8</math>@632 nm
Surface Flatness	<math>< \lambda/10</math>@632.8nm
Clear Aperture	>90%
Chamfer	0.1mm@45°
Thickness/Diameter Tolerance	± 0.05 mm
Size	Diameter:2mm-50mm,Length:5mm-180mm
Coating	<math>< 0.25\%</math> @ 2940 nm

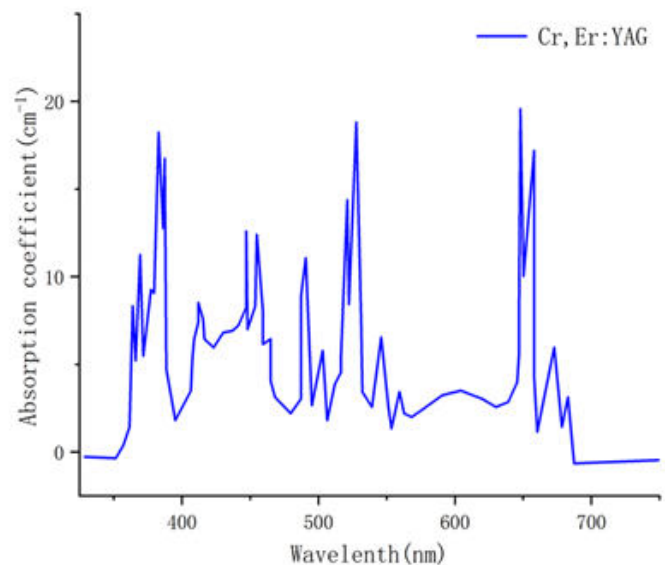
PHYSICAL AND CHEMICAL PROPERTIES

Melting Point	1950°C
Thermal Conductivity/(W·m ⁻¹ ·K ⁻¹ @ 25°C)	0.14 W
Specific Heat/(J·g ⁻¹ ·K ⁻¹)	0.59
Thermal expansion/(10 ⁻⁶ ·K ⁻¹ @ 25°C)	[100] orientation-8.2 [110] orientation-7.7 [111] orientation-7.8
Hardness (Mohs)	8.5
Yang's Modulus/ GPa	317
Shear Modulus / Gpa	54.66
Extinction Ratio	25 dB
Poisson Ratio	0.25

SPECTROGRAM



Laser spectra of Cr,Er:YAG crystals in the range of 2850-3000 nm



Absorption spectra of Cr,Er:YAG crystals in the range of 325 ~ 750 nm

