

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.

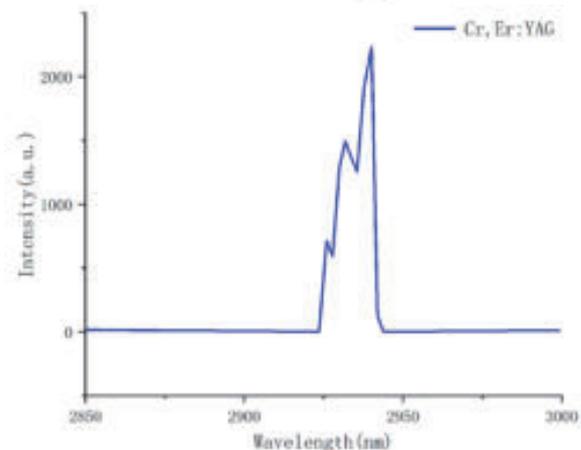
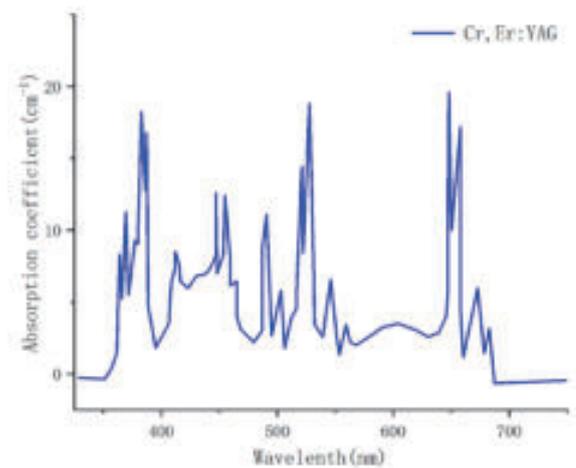
FEATURES

- 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

SPECTRA



Cr,Er:YAG

PARAMETERS

MATERIAL SPECIFICATIONS

Orientation	[100] or [100] $\leq \pm 0.5^\circ$
Parallelism	10 "
Perpendicularity	5 '
Surface Finish	5-Oct
Wavefront Distortion	$< -\lambda/8@632 \text{ nm}$
Flatness	$< \lambda/10@632.8 \text{ nm}$
Clear Aperture	$> 90\%$
Chamfer	0.1mm@45°
Thickness/Diameter Tolerance	$\pm 0.05 \text{ mm}$
Size	Dia: 2mm-50mm, length: 5mm-180mm
Coating	$< 0.25\% @ 2940 \text{ nm}$

PHYSICAL AND CHEMICAL PROPERTIES

Crystal Structure	Cubic – Ia3d
Lattice Constant	12.01 Å
Density	4.56 g/cm ³
Melting Point	1950°C
Thermal Conductivity / (W·m ⁻¹ ·K ⁻¹ @ 25°C)	0.14 W
Specific Heat Capacity / (J·g ⁻¹ ·K ⁻¹)	0.59
Thermal Expansivity / (10 ⁻⁶ ·K ⁻¹ @ 25°C)	[100] orientation – 8.2
	[110] orientation – 7.7
	[111] orientation – 7.8
Mohs Hardness	8.5
Young's Modulus	317
Shear Modulus / Gpa	54.66
Extinction Ratio	25 dB
Poisson Ratio	0.25

