

Cr4+:YAG Crystals

- Simple to use, no need of external driving system
- Compact setup
- Working frequency upto 10kHz

Chromium Doped Yttrium Aluminum Garnet **(Cr4+:YAG) Crystal** is excellent E-O material for passively Q-switching diode pumped or lamp-pumped Nd:YAG, Nd:YLF, Nd:YVO4 and other Nd (or Yb) doped lasers at 0.8~1.2µm. With the advantages of chemically stable, durable, UV resistant, good thermal conductivity, high damage threshold (>500 MW/cm2) and easy operation, **Cr4+:YAG** is edging out traditional materials, such as LiF, organic Dye and color centers.



SPECIFICATIONS

Specifications			
Dimensions range	Surface Area	2×2 mm ² ~ 14×14mm ²	
	Length	0.1mm ~ 12mm	
Doping Concentration	0.03mol% ~ 0.65mol%		
Initial Transmission	5% ~ 95%		
Flatness	< λ/10 @633nm		
Wavefront Distortion	< λ/6 @633nm		
Parallelism	< 30"		
Surface Quality	10/5 S/D (per MIL-O-13830A)		
AR coating	R<2% @ 1064nm or 1053nm		



Physical and optical Properties		
Chemical Formula	Cr ⁴⁺ :Y ₃ A ₁₅ O ₁₂	
Crystal Structure	Cubic Garnet	
Density	4.56g/cm ³	
Hardness	8.5 Mohs	
Damage Threshold	> 500 MW/cm ²	
Regractive Index	1.82 @ 1064 nm	