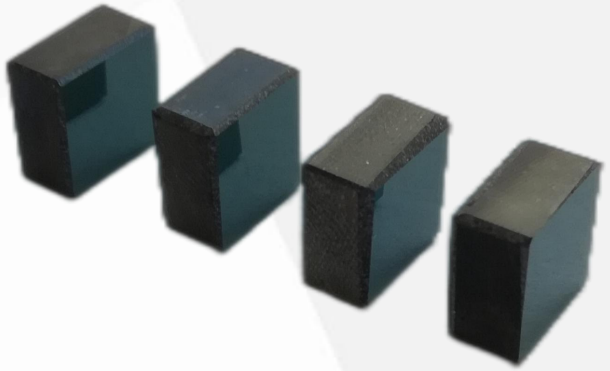
Cr:YAG crystals



Cr4+:YAG is an ideal material for passive Q-switching of Nd:YAG and other Nd and Yb doped lasers in the wavelength range of 0.8 to 1.2um.It is superior stability and reliability, long service life and high damage threshold.

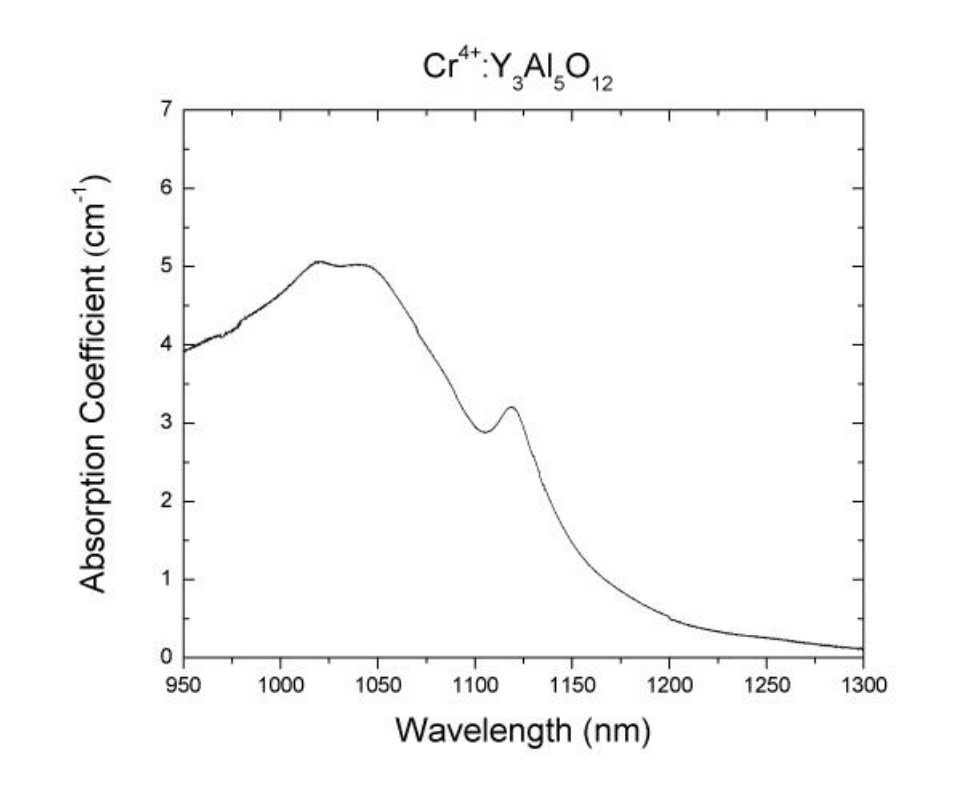
• Cr 4+ :YAG showed that the pulse width of passively Q-switched lasers could be as short as 5ns for diode pumped Nd:YAG lasers and repetition as high as 10kHz for diode pumped Nd:YVO4 lasers. Furthermore, an efficient green output @ 532nm, and UV output @ 355nm and 266nm were generated, after a subsequent intracavity SHG in KTP or LBO, THG and 4HG in LBO and BBO for diode pumped and passive Q-switched Nd:YAG and Nd:YVO4lasers.

• Cr 4+ :YAG is also a laser crystal with tunable output from 1.35 μm to 1.55 μm. It can generate ultrashort pulse laser (to fs pulsed) when pumped by Nd:YAG laser at 1.064 μm.

Advantages of Cr4+:YAG

• High chemical stability and reliability
• Being easy to be operated
• High damage threshold (>500MW/cm2)
• As high power, solid state and compact passive Q-Switch
• Long life time and good thermal conductivity

Cr:YAG crystals



Technical parameter	
Size:	3~20mm, H×W:3×3~20×20mm Upon request of customer
Dimensional tolerances:Diameter	Diameter: ±0.05mm, length: ± 0.5mm
Barrel finish	Ground finish 400#Gmt
Parallelism	≤ 20"
Perpendicularity	≤ 15 ′
Flatness	< λ/10
Surface Quality	20/10 (MIL-O-13830A)
Wavelength	950 nm ~ 1100nm
AR Coating Reflectivity	≤ 0.2% (@1064nm)
Damage threshold	≥ 500MW/cm2 10ns 1Hz at 1064nm
Chamfer	<0.1 mm @ 45°