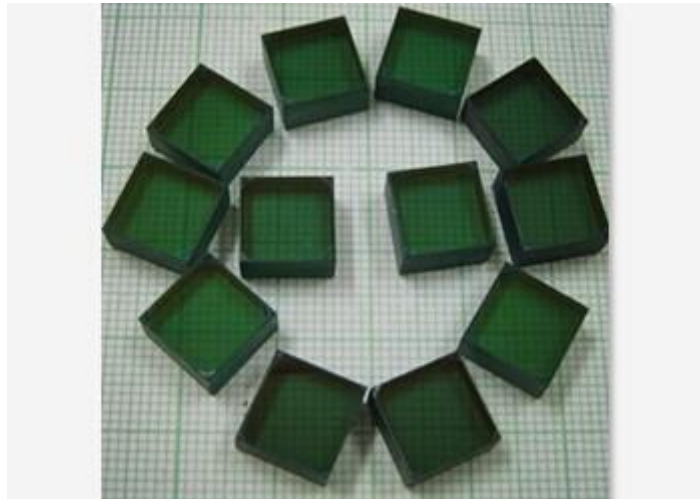
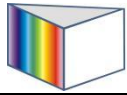


V3+:YAG Crystals

- **Chemical stability**
- **UV resistant and good thermal conductivity**
- **High damage threshold(>500MW/cm²)**

V3+:YAG crystals is a relatively new material for saturable absorber **passive Q-switching** in lasers emitting from 1.06 to 1.44 μm , in particular, for 1.3 μm Nd-lasers. Extremely high ground state absorption (GSA) cross section of $7 \times 10^{-18} \text{ cm}^2$ near 1.3 μm and negligible excited state absorption (ESA) permits Q-switching of 1.3 and 1.44 μm Nd-lasers without intracavity focusing both with flash-lamp and diode-laser pumping. Hangzhou Shalom EO offers the high quality V3+:YAG with laser grade polishing and coatings.





SPECIFICATIONS

Specifications	
Material	V ³⁺ :YAG Crystals
Orentation	<100> <+/-0.5°
Optical density	0.1-0.8
Absorption coefficient	1.0cm ⁻¹ - 7.0cm ⁻¹
Transmittance	30%-97%
Absorption cross section	2.8x10 ⁻¹⁸ cm ² (at 1.34um)
Thickness/Diameter tolerance	+/-0.1mm
Parallelism	10"
Perpendicular	5'
Surface quality	10/5
Wavefront distortion	Lambda/8 @ 632nm
Flatness	Lambda/8 @ 632nm
Aperture	>90%
Chamfer	<0.2 x 45°
HR coating	<= 0.2% (@ 1340nm)
Damage threshold	>500MW/cm ²