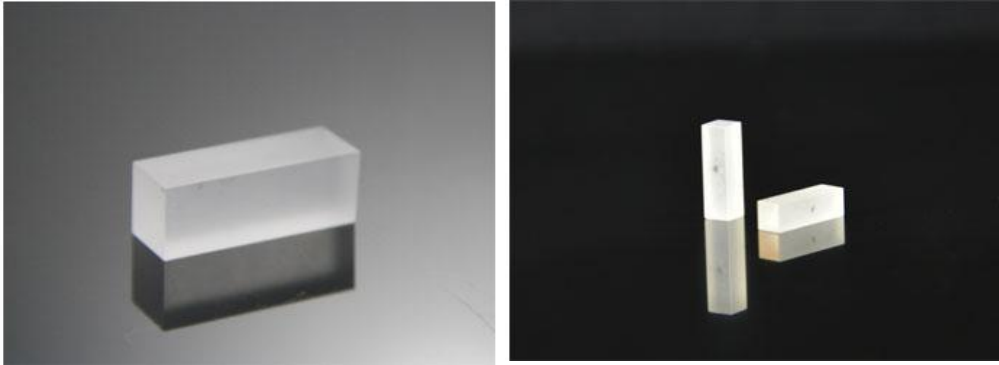


YCOB crystals

Yttrium calcium oxy borate ($\text{YCa}_4\text{O}(\text{BO}_3)_3$, YCOB crystal) crystal was good materials for nonlinear optical and high temperature piezoelectric applications. Hangzhou Shalom EO offers the YCOB crystals grown by CZ method, with maximum diameter upto 100mm, the custom specification crystals product is available upon your request.



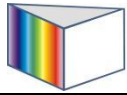
Features

Features:

- No deliquescence
- Larger effective NLO susceptibilities
- Large temperature acceptance
- High laser induce damaging threshold
- Less parametric luminescence (three orders less)
- Small thermal expansion coefficient and less anisotropy
- Very high electric resistivity

Applications

- Second harmonic generation (SHG)
- Third harmonic generation (THG)
- Optical parametric oscillator (OPO)
- Optical parametric amplification (OPA)
- Optical parametric chirped-pulse amplification (OPCPA)
- Piezoelectric devices



SPECIFICATIONS

Specifications of YCOB crystals	
Thickness/Diameter tolerance	+/-0.05mm
Orientation tolerance	<0.5 degree
Flatness	less than $\lambda/8$ @ 633nm
Transmitting wavefront distortion	less than $\lambda/4$ @ 633nm
Chamfer	$\leq 0.2\text{mm} \times 45^\circ$
Chip	$\leq 0.1\text{mm}$
Surface Quality	better than 10/5 S/D (MIL-PRF-13830B)
Parallelism	≤ 30 arc seconds
Perpendicularity	≤ 5 arc minutes
Clear aperture	>90%

Note: the custom special specifications is available upon customer's request.