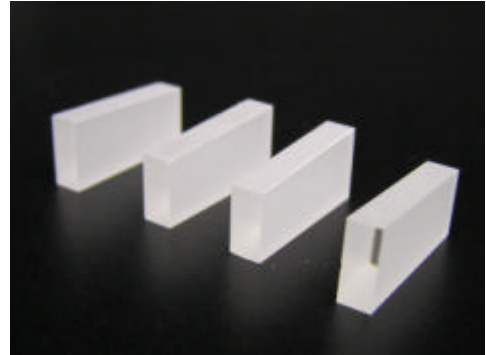


# High Quality TeO<sub>2</sub> for Acousto-Optics devices

## TeO<sub>2</sub> Features

- Wide transmittance range:  
350nm -5000nm
- High refractive index:  
no=2.26 ne=2.412 @633nm
- High figure of merit ( $M_2=10^{-8}S^3/g$ ): 795  
[Silica] 1, [PbMo<sub>4</sub>] 36



## Applications

- Acoust-Optics devices (AO Tunable Filter , AO Modulator, AO Deflector, AO Q-switch)

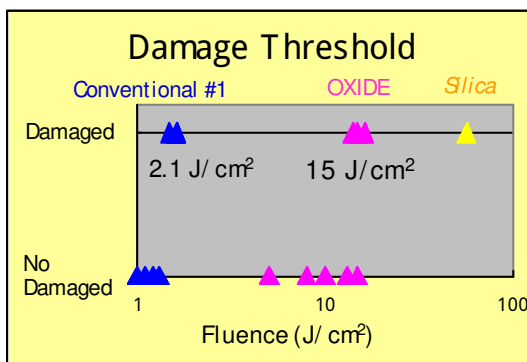


## Oxide TeO<sub>2</sub> Features

- High damage threshold (15J/ cm<sup>2</sup>)
- Non OH absorption @IR range
- Low absorption @1064nm, 532nm
- Low absorption @UV-blue range

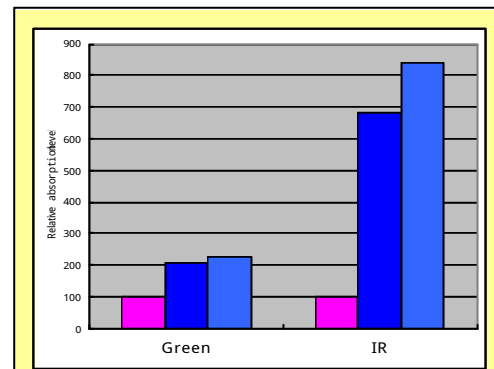
**7 times higher damage threshold compared to conventional crystals!**

**2 times less absorption @532nm  
7 times less @1064nm**



Tested by Institute for Laser Technology  
Test Method: N-on-1

Wavelength: 1064 nm  
Pulse width: 4 ns  
Beam size:  $\phi 70 \mu\text{m}$



Measurement condition

Pump: 1064nm & 532nm CW 1W  
Probe: 633nm CW 1W  
Chopping frequency: 420 Hz  
Beam waist:  $\phi 70 \mu\text{m}$

# OXIDE

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