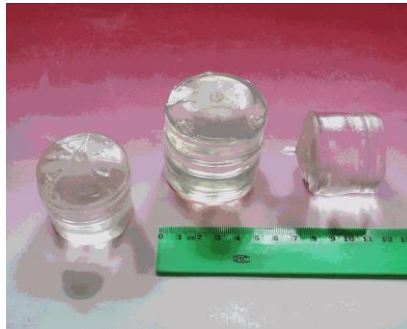


# New Scintillation Crystal $\text{Ce:Lu}_2\text{SiO}_5$



Ce doped  $\text{Lu}_2\text{SiO}_5$  crystal is a new scintillation crystal, which is using for x-ray inspection, medical examination and space physics. MTI supplies high quality Ce:  $\text{Lu}_2\text{SiO}_5$  crystal boule up to 2" diameter.

## Typical Properties

Crystal Structure	Trigonal
Point Group	2/m
Space Group	C2/c
Lattice Constant (A)	a =14.254、 b =10.241、 c =6.641、 $\gamma$ =122.20 Deg
Melting Point	2047 °C
Density	37.3~7.4 g/cm
Hardness	5.8 Moh
Refractive Index	1.82
Emission wavelength	418 nm
Relative emission Intensity	75% relative to NaI
After glow	40 ns
Resistant to radiation	$> 1 \times 10^8$ Rad
Moisture	No
Typical Crystal axis	Z cut
Typical crystal Boule Dimension	Max. Diameter : 2" Max Length: 2.5"
Crystal growth Technology	CZ

## MTI Corporation

860 South 19<sup>th</sup> Street, Richmond, CA 94804, USA

Tel: (510)525-3070 Fax: (510)525-4058 E-mail: [info@mtixtl.com](mailto:info@mtixtl.com) Website: [www.mtixtl.com](http://www.mtixtl.com)