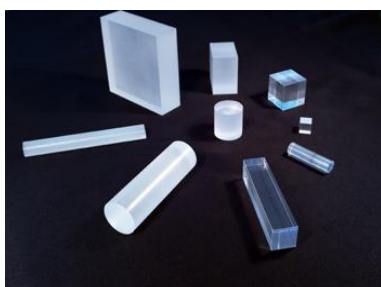


CsI(Tl) Scintillators

Thallium activated Cesium Iodide or CsI(Tl) crystals is one of the brightest scintillator. The maximum of the broad emission situated at 550nm is well suited for photodiode readout. It has excellent mechanical properties, with a light yield four-times higher than that of BGO and a radiation length shorter than that of NaI(Tl). CsI(Tl) is slightly hygroscopic with plastic mechanical properties. Combined with the relatively good radiation hardness properties, CsI(Tl) is well suited for High Energy Physics. CsI(Tl) arrays are widely used in the medical and security X-Ray CT. Hangzhou Shalom EO supplies the CsI(Tl) blanks, polished crystals, encapsulated scintillators and CsI(Tl) arrays, CsI(Tl) array +PD assemblies, 2-dimension arrays upon customer's request.



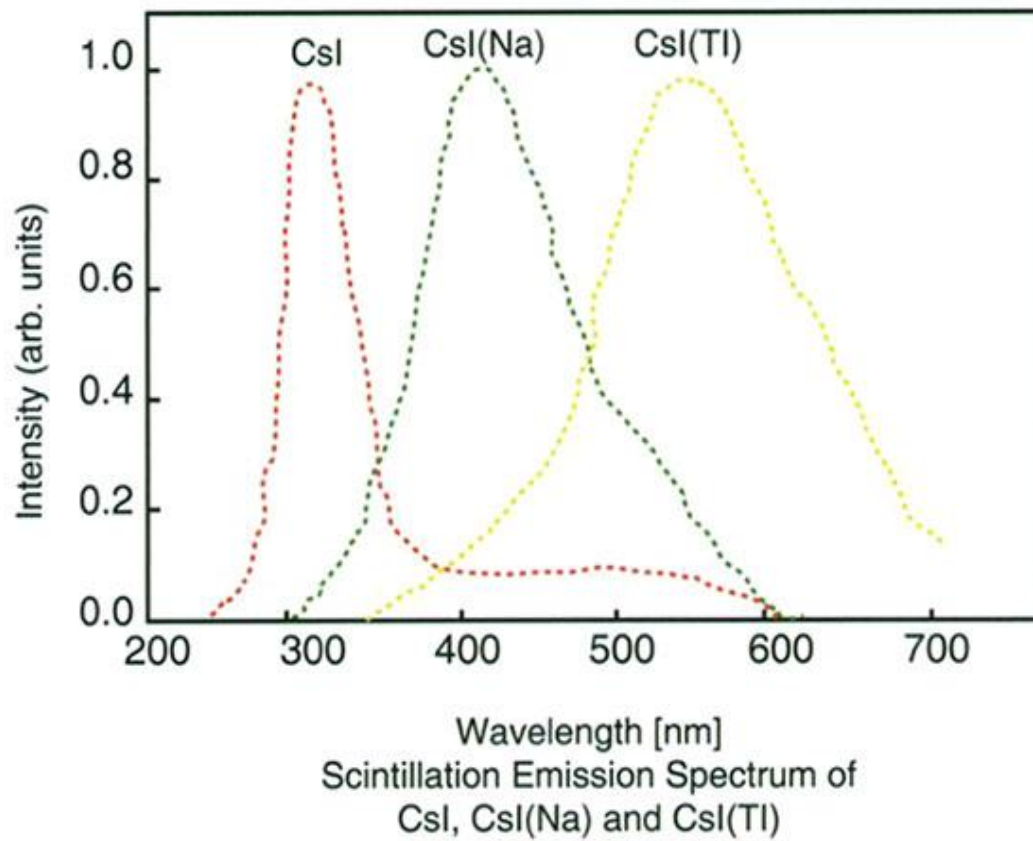
Specifications:

- Growth method: Bridgman
- Maximum dimension: \varnothing 110mm \times 300mm length
- Available items: single crystals and 1D array or 2D array

Basic Properties:

Basic Properties	
Density(g/cm ³)	4.51
Melting Point (K)	894
Cleavage Plane	None
Hardness (Mohs)	2
Hygroscopic	Slightly
Refractive Index @ Emission Peak	1.79
Emission Peak Wavelength (nm)	550
Lower Wavelength Cutoff (nm)	320
Decay Time (ns)	1000
Light Yield (% of NaI(Tl))	45

Note: The crystal boules, blanks and polished elements are available.



Application Notes:

- Nuclear radiation detection
- High energy physics
- Security inspection