

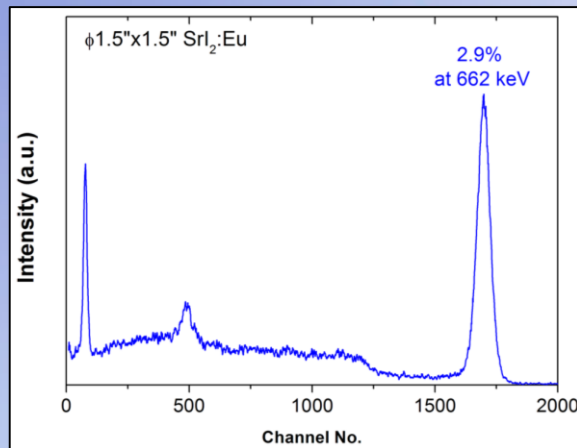
Strontium Iodide ($\text{SrI}_2:\text{Eu}$) Scintillator

for Gamma Radiation Detection

Strontium Iodide ($\text{SrI}_2:\text{Eu}$) is a scintillator with excellent energy resolution (better than 3.5%), high light yield (<80,000 ph/MeV), a linear of response, and no intrinsic radioactivity. As such, it is an ideal candidate for gamma-ray detection, as well as a desirable replacement for medium resolution scintillators such as NaI:Tl.

Due to remission-reabsorption of Eu^{2+} , the decay time for $\text{SrI}_2:\text{Eu}$ varies with sample size. Typically a $\text{Ø}1'' \times 1''$ cylinder will have a decay time of about 2.8 μs . Shorter decay times may be achieved with smaller samples. Smaller samples also have improved resolutions.

$\text{SrI}_2:\text{Eu}$ may be used in various portable detection instruments (e.g. handhelds as well as back-packs) for security and other applications. Our $\text{SrI}_2:\text{Eu}$ is currently available in different geometries, with or without encapsulation. Inquire for more details.



Light Yield	80,000 ph/MeV @ 662 keV	Density	4.59 g cm ⁻¹
Energy Resolution	better than 3.5%	Crystal Structure	Orthorhombic
Decay Time	1-3 μs (size-dependent)	Melting Point	540-550°C
Emission Range	400-480 nm	Moisture Sensitivity	Hygroscopic
Max Emission	430 nm	Refractive Index	1.85



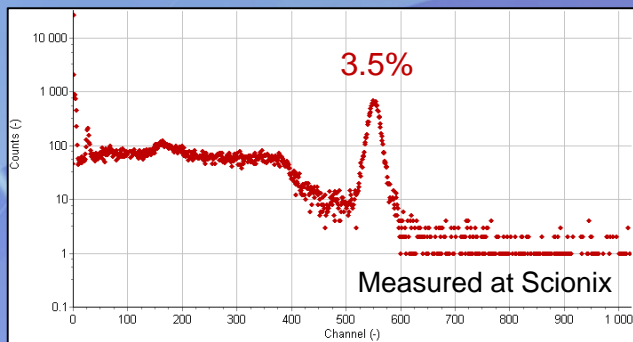
CapeSym, Inc.

Advanced Materials for Radiation Detection

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Additional Information

Performance of Assembled SrI₂:Eu and PMT Package



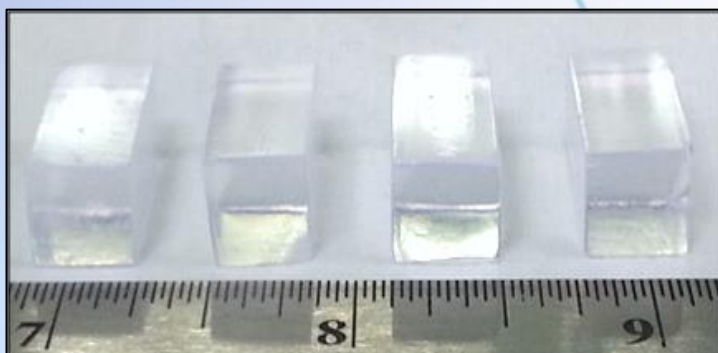
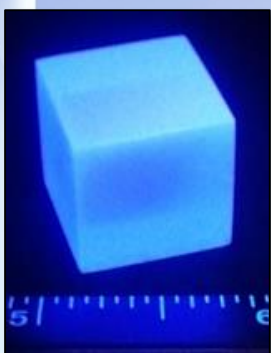
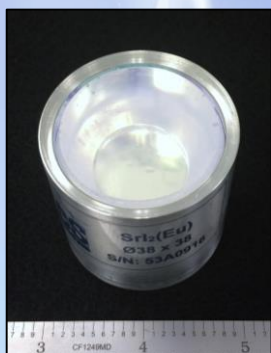
Description	Coupled to PMT, packaged at Scionix
Crystal Size	Ø1.5" x 1.5"
Energy Resolution	3.5%
Light Yield	80,000 ph/MeV
Photoelectric Yield	120-140% of NaI:Tl

Energy	Energy Resolution
59.5 keV	10%
122 keV	6%
356 keV	5%
662 keV	3.5%
1332 keV	3%
2600 keV	2.5%

Pricing and Availability

Strontium Iodide (SrI₂:Eu) is available bare or encapsulated in sizes up to Ø2 inch in diameter, in cylindrical or cuboid geometries.

Please contact us at sales@capesy.com for pricing and availability.



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