

SrI₂(Eu)

Excellent light output &
Excellent energy resolution
Scintillator

SrI₂(Eu)

Product Information

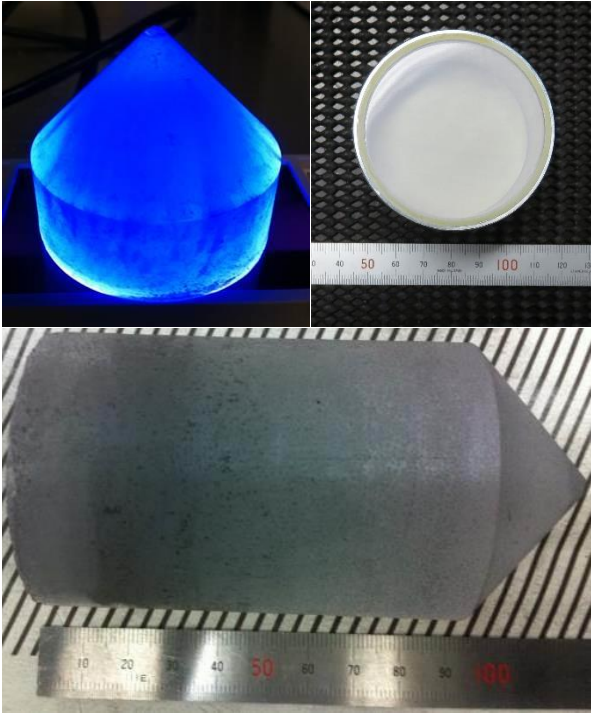


Fig.1: Photograph of SrI₂(Eu) scintillator.*¹

*¹Yoshikawa et al., J. Cryst. Growth, 452 (2016) 73-80.

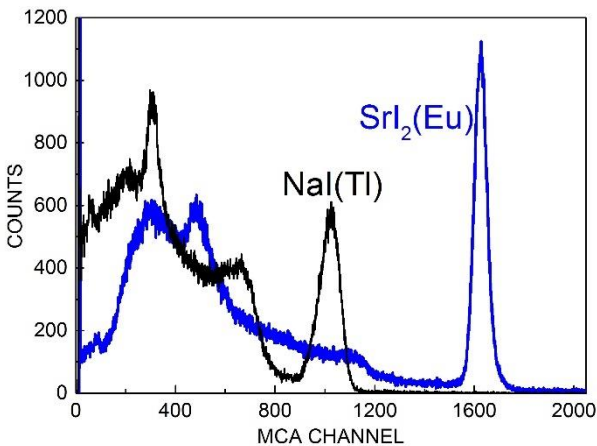


Fig.2: Pulse height spectra of NaI(Tl) and SrI₂(Eu) irradiated with gamma rays from a ¹³⁷Cs source.

Crystals for your future



C&A Corporation

Outline

SrI₂(Eu) scintillator has excellent light output and energy resolution among all scintillators. Compared with NaI(Tl), SrI₂(Eu) has higher gamma-ray stopping power by approximately two times. Moreover, SrI₂(Eu) has quite-small intrinsic gamma-ray background.

SrI₂(Eu) bulk single crystal with 2-inch-diameter is available now.

Scintillation Properties*²

| | |
|---------------------------------------|-----------------|
| Light output [photons/MeV] | 70,000 – 80,000 |
| Energy resolution (662 keV, FWHM) [%] | 3~4 |
| Decay time [ns] * ³ | 300 – 1,500 |
| Emission wavelength [nm] | 420 |
| Density [g/cm ³] | 4.6 |

*² All scintillation properties were measured using φ2 inch x 2 inch L sample coupled with R7600U-200 PMT.

*³ It depends on Eu concentration.

Single Crystal Growth Service
Consulting of crystalline business
Scintillator crystals, arrays and scintillation detectors
Piezoelectric crystals and piezoelectric devices