

GAGG

(Gd₃Al₂Ga₃O₁₂ (Ce))

High light output &
High energy resolution &
Non hygroscopic nature
Scintillator

GAGG

Product Information



Fig.1: Photograph of 3-inch-diameter GAGG scintillator. *1

*1 Kamada et al., J. Cryst. Growth, 452 (2016) 81-84.

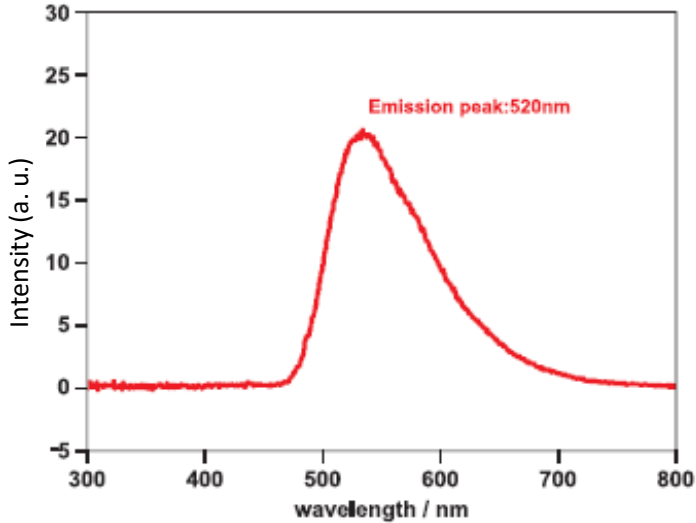


Fig.2: Radioluminescence spectra of GAGG excited by X-ray, CuK α , 30mA, 40mV

Outline

GAGG scintillator has high light output, high energy resolution and high density among oxide scintillators. GAGG has no hygroscopic and no self radiation nature.

3-inch-diameter GAGG bulk single crystal is available now.

Scintillation Properties*2

Light output [photons/MeV]	50,000-56,000
Energy resolution*3 (662 keV, FWHM) [%]	5-6
Decay time [ns]	92ns(86%), 174ns(14%)
Emission wavelength [nm]	520
Density [g/cm ³]	6.63

*2 All properties were measured using 5 x 5 x 5 mm³ sample.

*3 Energy resolution was measured with APD.

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