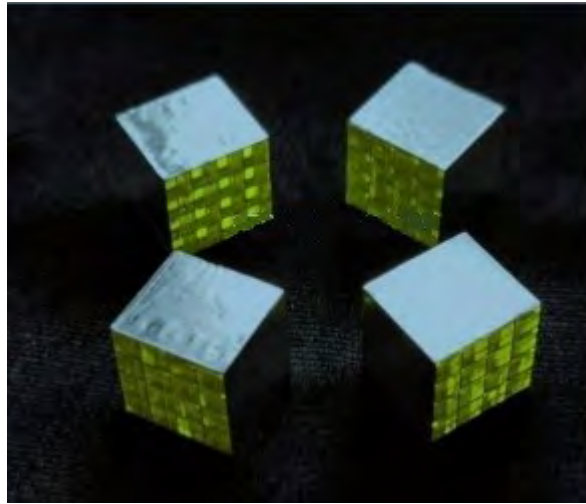




Ce:GAGG Crystal



Density (g/cm ³)	6.6
Hardness (Mohs)	~8
Decay time (ns)	90
Peak Emission (nm)	530
Energy resolution	<6%
Light yield (Photons/MeV)	45000
Hygroscopicity	None

Ce:GAGG (Gd₃Al₂Ga₃O₁₂) is expected to be a new promising scintillator for single photon emission computed tomography(SPECT), gamma-ray and Compton electron detection. A high photon yield and emission peak around 520 nm makes the material well suited to be readout by Silicon Photo-multiplier detectors.

Key Features

- High density
- High light yield
- Good energy resolution
- Non hygroscopic
- No self radiation

Applications:

- CT&TOF-PET&SPECT
- Gamma spectroscopy
- Compton electron detection

GAGG(Ce) has 4 types crystals with GAGG-faster decay time, GAGG-typical, GAGG-higher light yield and GAGG-higher energy resolution, they can be used in different fields upon your requests.

	Fast decay	Typical	High light yield	High energy resolution
Light output (Photons/Mev)	30000	42000	54000	50000
Energy resolution (662KeV)	~7%	~6%	~5%	~4.2%
Decay time (ns)	50	90	150	150
Density (g/cm ³)	6.6	6.6	6.6	6.6
Emission wavelength (nm)	520	530	530	530
Radiation resistance (rad)	10 ⁷	10 ⁷	10 ⁷	10 ⁷
Refractive index	1.91	1.91	1.91	1.91
Hardness(Mho)	~8	~8	~8	~8
Self-radiation	No	No	No	No

Note: test sample with cubic 5x5x5mm with SiPM readout.