

MarkeTech Lutetium Aluminum Garnet: Cerium (LAG:Ce) Scintillator Crystal

Category : Ceramic , Oxide

Material Notes:

Lutetium Aluminum Garnet activated by Cerium is relatively dense and fast scintillation material. Its density of 6.73 g/cm³ is about 6% less than the density of BGO. Decay time is much faster (70 ns) compared to BGO (300 ns). This is advantage for time dependent and coincidence measurements. Wavelength of scintillation emission is about 535 nm, similar as BGO (480 nm), which is ideal for Photodiode and Avalanche Diode readout. This material can be used also for Imaging Screens, similarly to YAG:Ce. The advantage of LuAG:Ce is its higher density allowing for thinner screens with higher spatial resolution. The material is mechanically and chemically stable, it can be machined to variety of shapes and sizes including prisms, spheres, and very thin plates. Its primary advantage high density, fast decay time, a wavelength of luminescence emission well suitable for photodiode and avalanche diode readout, chemical, mechanical, and temperature resistance make it an ideal choice for PET scanners, high energy gamma and charge particle detection, and high spatial resolution Imaging Screens for Gamma, X, Beta and UV ray. Data provided by the supplier, MarkeTech International.

Order this product through the following link:

http://www.lookpolymers.com/polymer_MarkeTech-Lutetium-Aluminum-GarnetCerium-LAGCe-Scintillator-Crystal.php

Physical Properties	Metric	English	Comments
Density	6.73 g/cc	0.243 lb/in ³	

Descriptive Properties	Value	Comments
Crystal Structure	Cubic	
Luminescence: Decay Constant	70 n/s	
Luminescence: Photon Yield	10	300K; 10 ^{>3</sup> pH/MeV}
Luminescence: Wavelength of max emissions	535 nm	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China