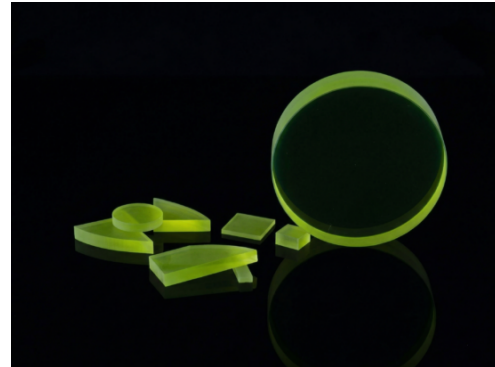


SCINTILLATION CRYSTALS

LuAG(Ce) Scintillation Crystal

Product Brochure & Technical Reference

Cerium-doped lutetium aluminum garnet for scintillation crystals and screens. Specify geometry, surface finish and readout requirements; lutetium-containing materials require background review.



Reference product image. Shown geometry is illustrative.

Material reference properties / options

Parameter	Reference value or option
Chemical formula	$\text{Lu}_3\text{Al}_5\text{O}_{12}:\text{Ce}$
Crystal structure	Cubic garnet
Material family	Lutetium aluminum garnet scintillator
Density	6.73 g/cm ³
Hygroscopicity	Non-hygroscopic
Wavelength of maximum emission	535 nm
Decay time	70 ns; material reference value
Light output relative to NaI(Tl) = 100%	20%; readout and measurement conditions to be confirmed

Reference values and options for selection. Confirm the material grade, geometry, test conditions and acceptance criteria for the quoted configuration.

SCINTILLATION CRYSTALS

Configuration & quotation

Define the component around your application

Application examples: Electron microscopy scintillator screens; X-ray imaging screens; SEM and TEM detector components

LuAG(Ce) Physical and Scintillation Properties

Parameter	Reference value or option
Hardness	8.5 Mohs
Index of refraction	1.84; confirm the wavelength for optical design
Melting point	2020 °C
Photon yield	25,000 photons/MeV; reference value with test conditions to be confirmed
Formats	Crystal, scintillation screen and custom detector element

Prepare your quotation

RFQ item	Information to provide
Application	Electron microscopy, X-ray imaging or another specified radiation measurement.
Component geometry	Crystal or screen, active area, thickness, dimensions, tolerances and mounting details.
Optical interface	Camera or photosensor, readout face, coupling arrangement and any reflector or coating request.
Surface and inspection	Polishing, visual defect criteria, flatness and surface inspection requirements.
Acceptance test	Required signal response, afterglow, uniformity or background limits, with test conditions.
Order details	Quantity, drawing, packaging, requested records and intended delivery schedule.

Reference values and options for selection. Confirm the material grade, geometry, test conditions and acceptance criteria for the quoted configuration.

Send drawings for engineering review

sales@atrscintillator.com | +86 17796747312

Open product and inquiry page | Hangzhou, Zhejiang, China