LaBr₃(Ce) Crystal



LaBr₃ Crystal is a scintillation material used for radiation detection and spectral analysis. It has attracted widespread attention due to its excellent energy resolution, high light output and fast response time. The properties of LaBr₃ Crystal make it suitable for a variety of applications, including nuclear medicine, homeland security, environmental monitoring and scientific research. They are commonly used in gamma-ray spectrometers, positron emission tomography(PET) machines and gamma cameras.

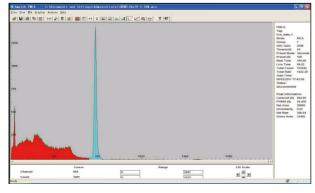
General parameters	LaBr ₃ (Ce)	Unit
Density	5.20	g/cm ³
Melting Point	1,116	K
Wavelength of Emission Peak	380	nm
Light Output	68,000	ph/MeV
Decay Constant	16	ns
Cleavage	(100)	/
Hygroscopic	Yes	/
Refractive Index	1.90	/

Basic Information

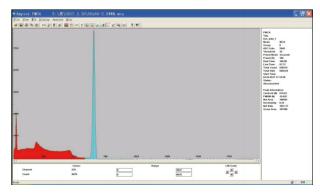
- Growth technique ----- Bridgman
- Dimension(max) ----- Diameter 76 mm×200 mm
- Achieved items Encapsulated and assembly detectors

Characterization

Dimension of LaBr₃(Ce): Ø38×38 mm, Ø50×50 mm, PMT: R6231; Radiation source: Cs¹³⁷; Energy resolution: 2.78% (Ø38×38 mm LaBr₃); 2.94% (Ø50×50 mm LaBr₃)







Spectrum of Ø50×50 mm LaBr₃(Ce)