



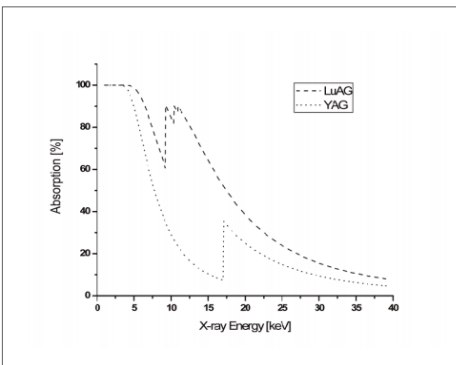
LuAG:Ce is a typical scintillation crystal with garnet structure, which has high light yield, high density and good mechanical properties. LuAG:Ce flakes combined with FOP and CCD can be well used in X-ray microscopy and micro-nanCT. Good spatial resolution can be obtained.

General parameters	LuAG(Ce)	Unit
Density	6.7	g/cm ³
Radiation Resistance	1×10 ⁶	rad
Wavelength of Emission Peak	520	nm
Light Output	25,000	ph/MeV
Decay Constant	68	ns
Hygroscopic	no	/
Effective Atomic Number	63	/
Hardness	8.0	mohs

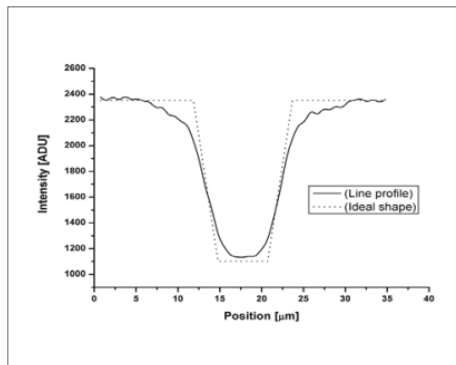
Basic Information

- Growth method Czochralski
- Dimension(max) Diameter 80 mm×100 mm
- Achieved items Single crystal, thin slice

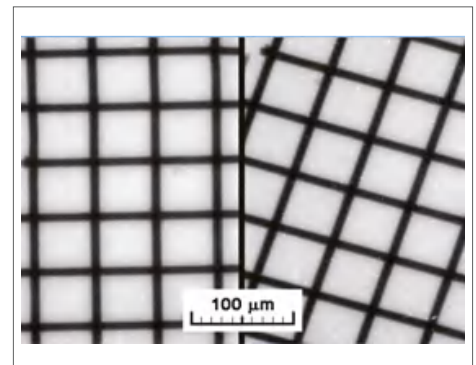
Characterization



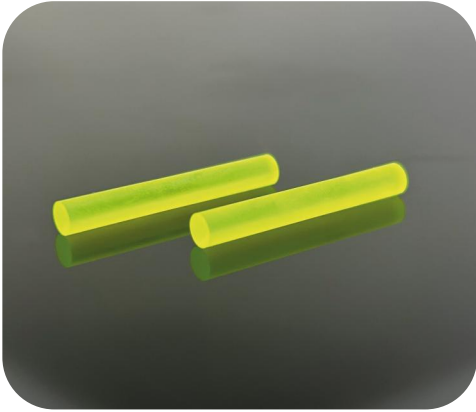
X-Ray Absorption curve



Line profile of the grid wire



Spatial resolution



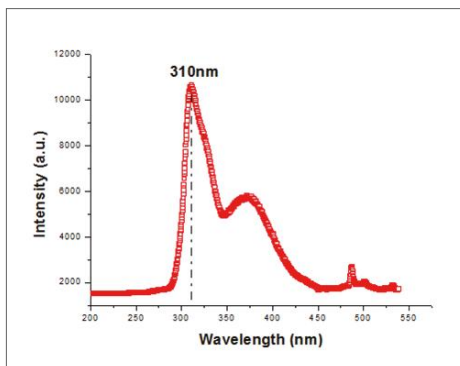
LuAG:Pr is a fast blinking crystal with a decay time of 22 ns. Based on the excellent properties of LuAG:Pr, it is very suitable for PEM, TOF-PET and fast particle imaging. In addition, LuAG:Pr has good energy resolution and temperature stability, so it can also be well used in well logging.

General parameters	LuAG(Pr)	Unit
Density	6.7	g/cm ³
Radiation Resistance	1×10 ⁶	rad
Wavelength of Emission Peak	310	nm
Light Output	20,000	ph/MeV
Decay Constant	22	ns
Hygroscopic	no	/
Effective Atomic Number	63	/
Hardness	8.0	mohs

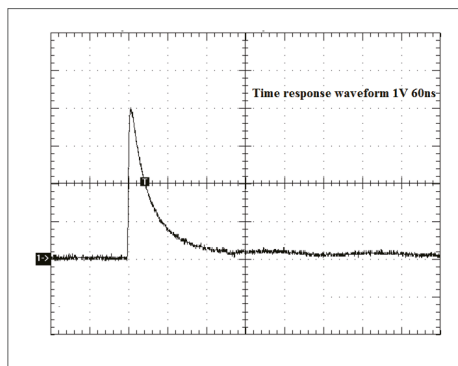
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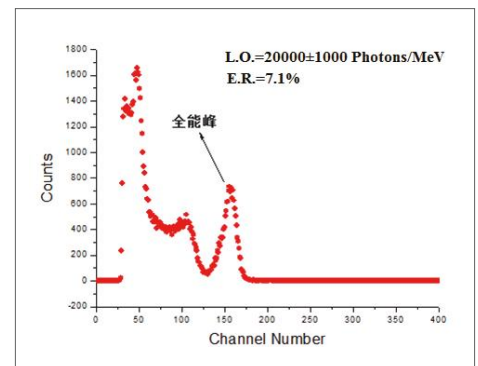
Characterization



X-Ray excited Luminescence



Time response waveform



Light output & Energy resolution curve