

Crystaltechno Ltd. offers grown in house

Yttrium Aluminium Perovskite Single Crystals Doped with Cerium (YAP:Ce)

For medical radiology

YAP:Ce Yttrium aluminum perovskite activated by cerium is a fast, mechanically strong and chemically resistant scintillation material.

Chemical formula, crystal : activator	YAlO ₃ : Ce ³⁺
Activator concentration, at. %	1,0
Crystal structure	orthorhombic
Lattice cell parameters, Å	a = 5,18 b = 5,31 c = 7,36
Density, g/cm ³	5,38
Melting point, ° C	1850
Mohs' hardness	8,5
Index of refraction	1,94
Optical transparency region, μm	0,22 - 6,0
Emission wavelength, μm	0,37
Integrated light yield, % to NaI (TI)	40
Decay time constant, ns	28
Linear thermal expansion coefficient, K ⁻¹	(0,4–1,1)·10 ⁻⁵
Thermal conductivity, W/(cm K)	0,11
Maximal dimensions of crystals, mm	150 x 250 x 25

*If you are interested please feel free to contact us!
You can receive the additional information*

e-mail: sales@crystaltechno.com