

Ce:GAGG 钪掺杂钆铝镓石榴石 Cerium doped Gadolinium

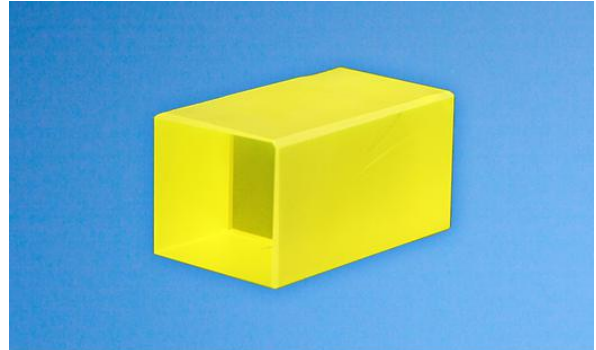
Aluminium Gallium Garnet

简介 Introduction:

钪掺杂钆铝镓石榴石 (Ce:GAGG) 是一种相对较新的单晶闪烁体，具有许多性能，如光产量高，密度高，能量分辨率好，与硅传感器匹配良好的发射峰，低内在能量分辨率。

此外，该材料是非吸湿性和非自辐射性的。它广泛应用于 PET, PEM, SPECT, CT, X 射线和 γ 射线检测等。

Ce:GAGG is a relatively new single crystal scintillator with many properties, such as high light yield, high density, good energy resolution, good emission peak matching with silicon sensor and low intrinsic energy resolution. In addition, the material is non-hygroscopic and non-self-radiative, which is widely used in PET, PEM, SPECT, CT, X and γ ray detection and so on.



主要优点 Main Advantages:

高光输出 High output

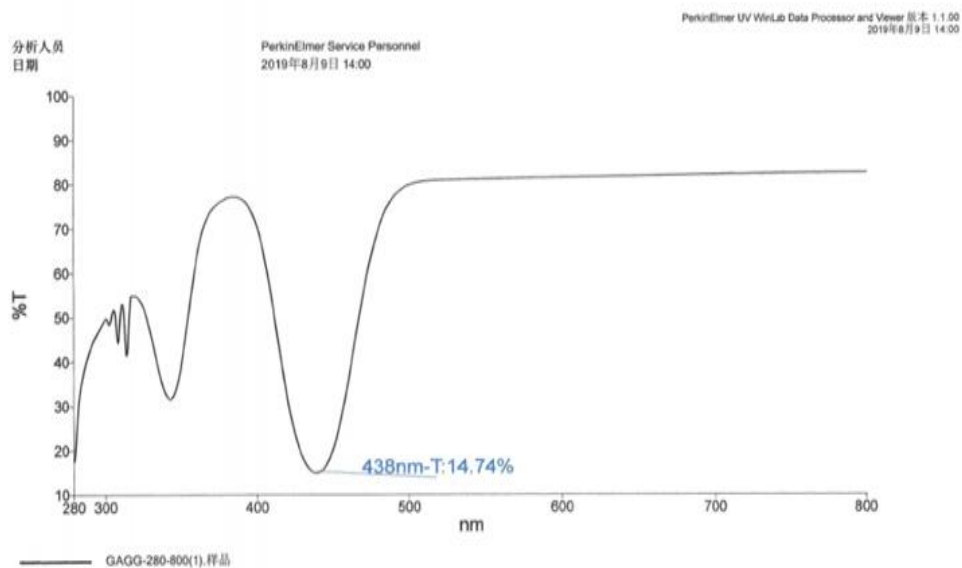
能量分辨率高 High energy resolution

密度大 High density

无自辐射 No self-radiation

无潮解 No deliquescing

透射曲线 Transmission Curve:



材料特性 Material Properties:

分子式 Chemical Formula	Ce:Gd ₃ Al ₁₂ Ga ₃ O ₁₂
密度 Density	6.63g/cm ³
硬度 Hardness	8 Mohs
熔点 Melting point	1850°C
原子数 Atomic number	54.4
生长方法 Growth Method	Czochralski
热膨胀系数 Expanding coefficient	TBA*10 ⁻⁶

科瑞思创提供 Crystro offers:

晶向 Orientation	< 0.5°
厚度和直径公差 Thickness /Diameter Tolerance	±0.05mm
平行度 Parallelism	< 30"
垂直度 Perpendicularity	< 15'
光洁度 Surface Quality	10/5
通光孔径 Clear aperture	> 90%
倒角 Chamfer	< 0.1*45°
最大尺寸 Dimensions	MaxΦ60mm

备注：以上参数为参考数据，具体产品技术要求请联系销售人员确认。

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