



Phosphor Information Leaflet

GENERAL

Name	Lanthanum gadolinium oxide chromium
Chemical formula	LaGaO ₃ :Cr ³⁺
Application areas	Laser gain media

OPTICAL PROPERTIES

Excitation maxima @ 720 nm em.	266 nm (4.66 eV); 449 nm (2.76 eV); 625 nm (1.99 eV)
Emission maximum @ 450 nm exc.	727 nm (1.71 eV); 750 nm (1.65 eV)
Centroid wavelength	734 nm
Full width @ half emission maximum	line
Lumen equivalent	3 lm/W
CIE1931 chromaticity coordinates (x, y)	0.688; 0.312
Band edge of host lattice	5.6 eV
Reflection @ 450 nm	44 %
Decay time $\tau_{1/e}$	

PHYSICAL PROPERTIES

Body colour	pale pink
Density	7.4 g/cm ³
Refractive index (at λ)	2.05
Mineral type	perovskite
Crystal system	trigonal
Space group (#)	C12/m1 (12)



