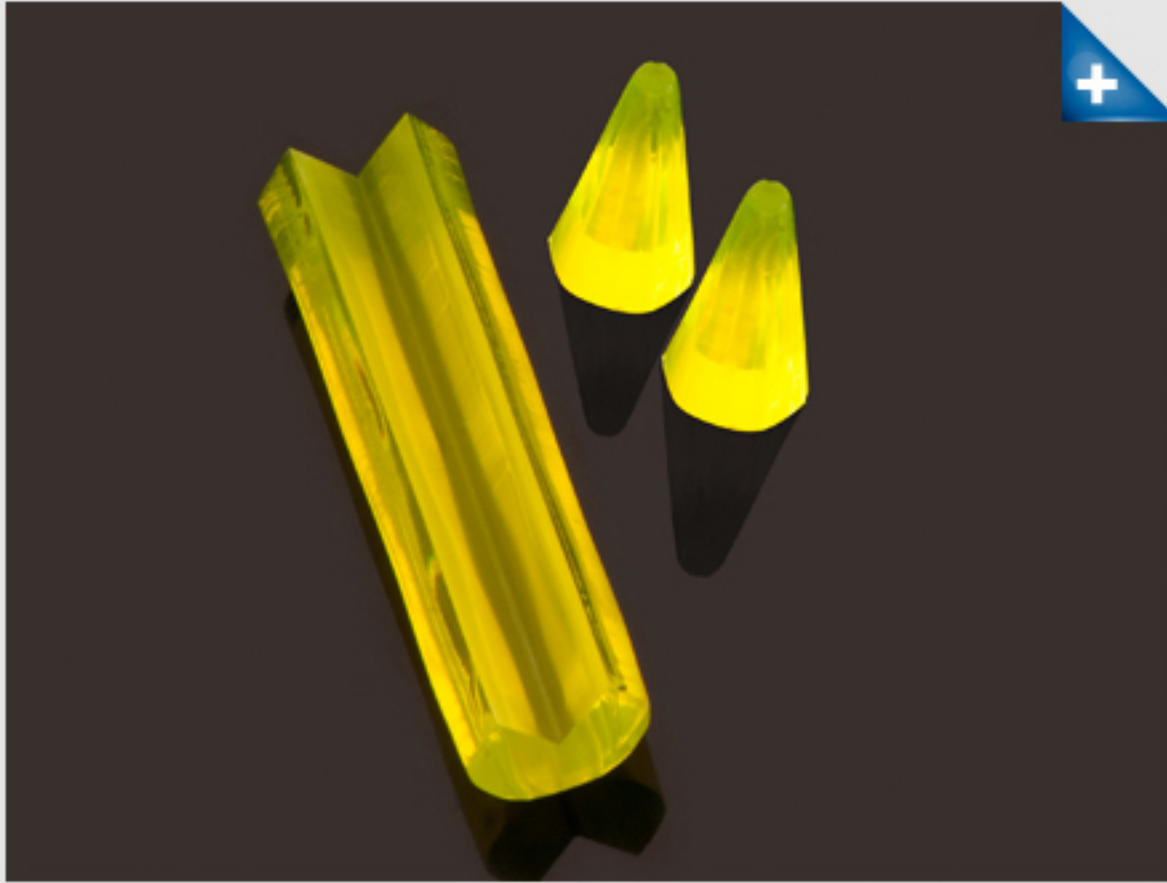


## Laser Materials Ce:YAG



### General Information

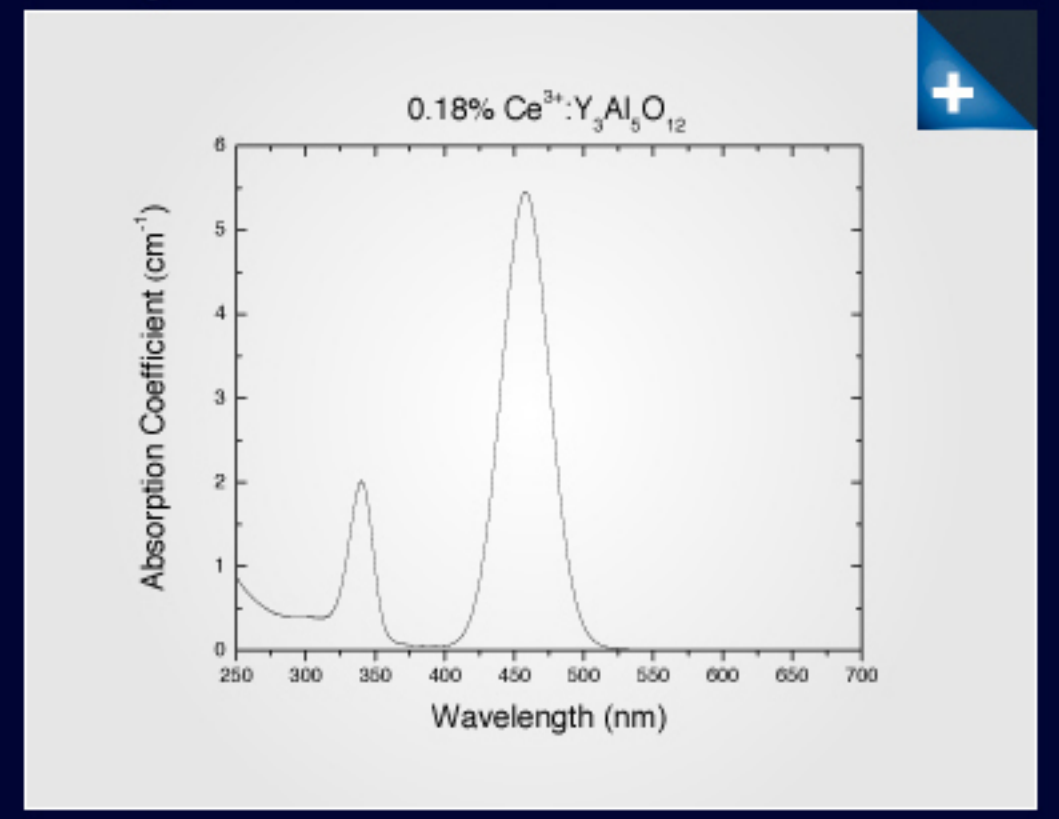
Cerium-doped YAG is commonly used as a phosphor in cathode ray tubes and white light-emitting diodes, and as a scintillator.

[Contact us](#) with your specific requirements or for availability and pricing.

### Physical Properties

Coefficient of Thermal Expansion	$6.14 \times 10^{-6} \text{ K}^{-1}$
Thermal Diffusivity	$0.041 \text{ cm}^2 \text{ s}^{-2}$
Thermal Conductivity	$11.2 \text{ W m}^{-1} \text{ K}^{-1}$
Specific Heat (Cp)	$0.59 \text{ J g}^{-1} \text{ K}^{-1}$
Thermal Shock Resistant	$800 \text{ W m}^{-1}$
Refractive Index @ 632.8 nm	1.83
dn/dT (Thermal Coefficient of Refractive Index) @ 1064nm	$7.8 \times 10^{-6} \text{ K}^{-1}$
Molecular Weight	$593.7 \text{ g mol}^{-1}$
Melting Point	1965°C
Density	$4.56 \text{ g cm}^{-3}$
MOHS Hardness	8.25
Young's Modulus	335 Gpa
Tensile Strength	2 Gpa
Crystal Structure	Cubic
Standard Orientation	<111>
Y3+ Site Symmetry	D <sub>2</sub>
Lattice Constant	a=12.013 Å

### Absorption Coefficient Chart



Need Help? Please Call: **(406)585-3772** or Email: [sales@scientificmaterials.com](mailto:sales@scientificmaterials.com)

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