

Undoped YAP crystals

YAP with large density, high mechanical strength, stable chemical properties, not soluble in organic acid, alkali resistance, and has higher thermal conductivity and thermal diffusivity. YAP is an ideal laser substrate crystal.



Basic properties	
Formula	Y ₃ Al ₂ O ₁₂
Molecular weight	593.7
Structure	cubic
Mohs hardness	8-8.5
Melting point	1950°C
Density	4.55g/cm ³
Thermal conductivity	0.14W/cmK
Special heat	88.8J/gK
Thermal diffusivity	0.050cm ² /s
Expansion coefficient	6.9×10 ⁻⁶ /°C
Refractive index	1.823
Color	Colorless