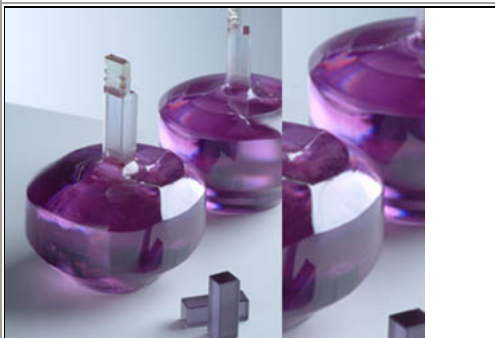


Text:

ALEXANDRITE (optical)

BERYLLATE LANTHANUM

GADOLINIUM VANADATE (with Neodim)



New Nd³⁺-doped gadolinium vanadate crystals GdVO₄:Nd³⁺ allow to create effective diode-pumped lasers for applications in medicine and technique.

Sizes and dimensions of elements can be varied according to customer's demand.

Matrix properties	
Generation transitions	$^4F_{3/2}(P)^4I_{13/2}$ $^4F_{3/2}(P)^4I_{11/2}$
Generation wavelength (nm)	1062,9 – 1340
Absorption coefficient (cm ⁻¹):	E C 74 at 808 nm E. C 10 at 808 nm
Wavelength range for diode pumping (nm)	805 – 815
Lattice parameters (Å)	a = 7,21 b = 7,21 c = 6,35
Density (g/cm ³)	5,47
Thermal conductivity (W/m×K)	11,7 (011) 9,6 (100)
Characteristics of crystal	
Nd ³⁺ concentration (at.%)	0,1 – 4
Cross-section (mm)	from 2×2 to 5×10
Specification of laser rods (sizes and processing)	
Rod's length (mm)	0,5 – 20
Diameter tolerance (mm)	± 0,1
Length tolerance (mm)	± 0,1
Non-parallelism of end faces (s)	10"
Surface finish	10-5
Flatness	λ/10

VANADATE YTTRIUM

YTTRIUM ORTHOVANADATE (doped with Erbium and Ytterbium)

YTTRIUM ORTHOVANADATE (monocrystal)

HEXAALUMINATE BERYLLIUM

TITAN-SAPPHIRE

FORSTERITE

SPINEL

ALEXANDRITE (jewellery)

RUBY

TANZANION