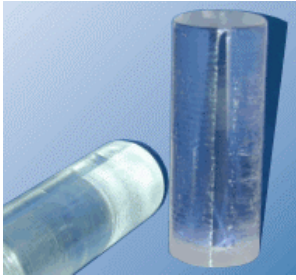


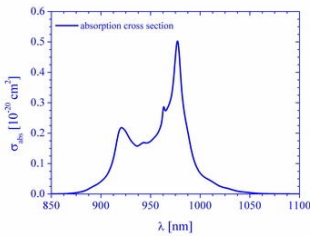


Yb:CaF₂ 結晶

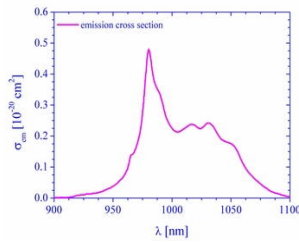
最大：φ18mm/最大長：25mmまで可能 2.3mol percent



Absorption Cross Section



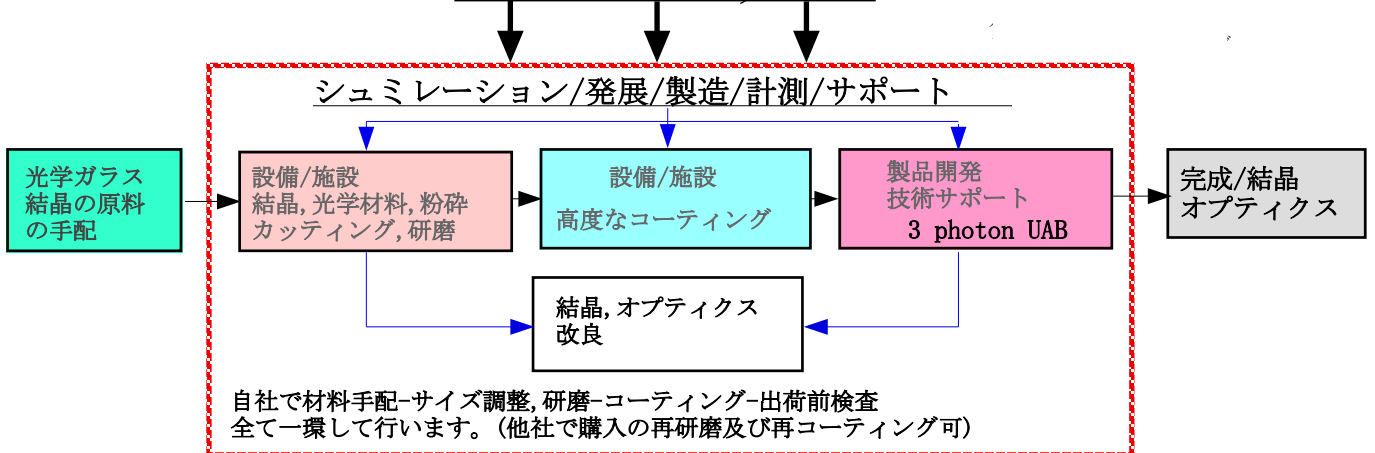
Emission Cross Section



Crystal Structure	Cubic, Fm3m, a=5.462
Atomic Density	2.45 x 10 ²² cm ⁻³ (Ca ²⁺ ions)
Density	3.18 g cm ⁻³
Knoop Hardness	158.3 kg mm ⁻²
Young Modulus	75.8 GPa
Fracture Strength	157.2 ± 13.7 MPa
Poisson Ratio	0.26
Thermal Expansion Coefficient	18.7 x 10 ⁻⁶ K ⁻¹
Thermal Conductivity (Yb-doping)	11.7 W m ⁻¹ K ⁻¹ (undoped)
Specific Heat	853 J kg ⁻¹ K ⁻¹ (@300 K)
Melting Point	1423 °C
Refractive indexes	n = 1.4289 (@ 1 μm), n = 1.42925 (@ 950 nm) n _o ² (λ) = A ₀ + A ₁ λ ² + A ₂ λ ⁻² + A ₃ λ ⁻⁴ + A ₄ λ ⁻⁶ + A ₅ λ ⁻⁸ + A ₆ λ ⁻¹⁰
Sellmeier Equation (undoped CaF ₂)	A ₀ =2.010676482, A ₁ =0.09792014958, A ₂ =0.009375701135, A ₃ =-0.0001423385867, A ₄ =0.000007129779833, A ₅ =-0.0000001168313575, A ₆ =0.000000001055628646 dn/dT = -11.5 x 10 ⁻⁶ K ⁻¹ (@1.1μm) dn/dT = (B ₀ + B ₁ λ ² + B ₂ λ ⁻² + B ₃ λ ⁻⁴ + B ₄ λ ⁻⁶) x 10 ⁻⁶ K ⁻¹ B ₀ = -57.18332811, B ₁ = 268.2922914, B ₂ = 3.102836946, B ₃ = -0.08060676782, B ₄ = 0.0009506519835
Thermal Optical Coefficient	
Fluorescence Lifetime (Yb-doping)	2.2 ms (8 atm%)
Lasing Wavelengths	1030 nm

弊社より光学結晶/光学ミラー/光学オプティクスを仕様に合わせて提供します。

AMISTAR, INC.



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