

Structural and Physical Properties:

	GTR-KTP	BBO	LBO	KTA	BIBO	LiNbO3	KD*P	AgGaS2	RTP
Crystal stru.	Orthorhombic	Trigonal,	Orthorhombic	Orthorhombic	Monoclinic	Trigonal	Tetragonal	Tetragonal	Orthorhombic,
Space group	Pna2 ₁	R _{3c}	Pna2 ₁	Pna2 ₁		R _{3c}			Pna2 ₁
Point group	mm2		mm2	mm2	mm2	3m	42m	42 m	Mm2
Cell parameters	a=6.404Å, b=10.616Å, c=12.814Å, Z=8	a = b = 12.532 Å c = 12.717Å Z = 6	a=8.4473 Å , b=7.3788 Å , c=5.1395 Å , Z=2	a=13.125 b=6.5716 c=10.786	a = 7.116 Å, b = 4.993 Å, c = 6.508 Å Z =2	a=5.148Å , c=13.863Å		a=5.757Å , c= 10.305 Å	a = 12.96 Å°,b = 10.56 Å,c = 6.49Å°
Melt point	1172°C	1095± 5°C	834 ° C	1130±5°C	726°C	1253°C		997°C	~ 1000 °C
Curie point	936°C	925± 5°C		880°C		1140° C			~810°C
Mohs hardness	≈5	4	≈6	≈5	5 - 5.5	≈5	2.5		~5
Density	3.01 g/cm ³	3.85 g/cm ³	2.47 g/cm ³	3.454 g/cm ³	5.033 g/cm ³	4.64 g/cm ³	2.355 g/cm ³	4.56 g/cm ³	3.6 g/cm ³
Thermal expansion coefficients: (/k)		a,4 x 10 ⁻⁶ ; c, 36 x 10 ⁻⁶	X:10.8x10 ⁻⁵ Y:-8.8x10 ⁻⁵ Z:3.4x10 ⁻⁵		X:4.8x10 ⁻⁵ Y:4.4x10 ⁻⁶ Z:-2.69x10 ⁻⁵	//a2.0x10 ⁻⁶ //c16.7x10 ⁻⁶	1.9x10 ⁻⁵ ⊥z 4.4x10 ⁻⁵ // z	28.5x10 ⁻⁶ //a -18.7 x10 ⁻⁶ // c	a ₁ =1.01x10 ⁻⁵ , a ₂ =1.37x10 ⁻⁵ , a ₃ =-4.17x10 ⁻⁶
Hygroscopic susceptibility	NO	A Little	A Little	NO	no	no	Yes	no	no
Thermal conductivity W/m/K	13	⊥c, 1.2; //c, 1.6	3.5	k1=1.8, k2=1.9, k3=2.1		38 at 25 ⁰ C	1.9 ⊥ z 2.1 // z	1.5 ⊥ c 1.4 //c	
Therm-optic coefficients: (dn/dT, /°C,)	X:1.1x10 ⁻⁵ Y:1.3x10 ⁻⁵ Z:1.6x10 ⁻⁵	o: -9.3 x 10 ⁻⁶ e:-16.6 x 10 ⁻⁶	X: -1.8x10 ⁽⁻⁶⁾ Y:-13.6x 10 ⁽⁻⁶⁾ Z:(-6.3-2.1 l) x 10 ⁽⁻⁶⁾			o:-0.874x10 ⁻⁶ e:39.073x10 ⁻⁶			