

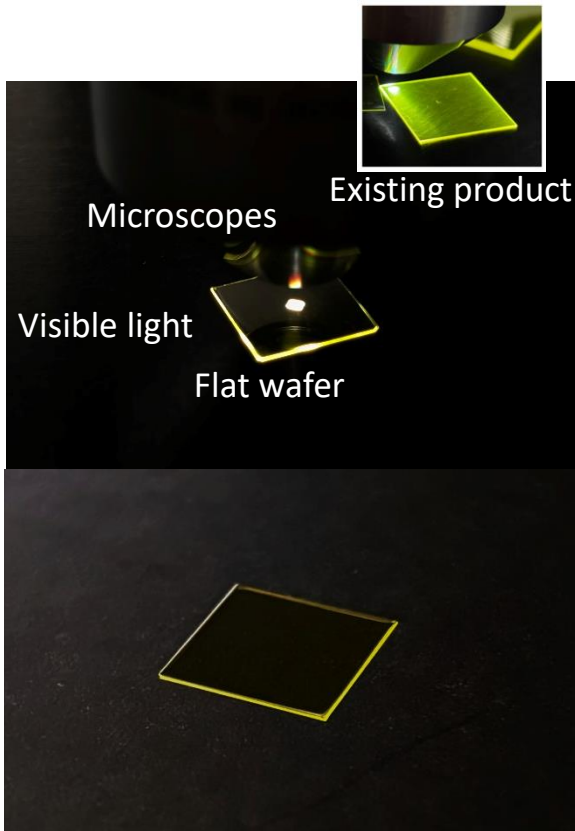
# GAGG Flat Wafers for X-ray Imaging

## $Gd_3Al_2Ga_3O_{12}$ (Ce)

GAGG

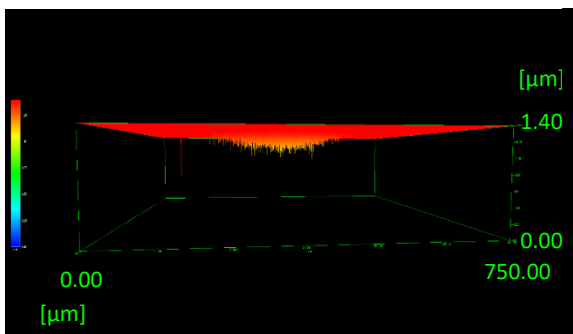
Patent No.: EP2671940(B1), US8969812(B2), RU2622124(C2), JP5952746(B2)  
EP3138891(B1), US10174247(B2), RU2670919(C9)

### Product Information



#### GAGG single crystal \*1 flat wafer

\*1 Kamada et al., J. Cryst. Growth, 452 (2016) 81-84.



Surface Roughness 3D Image  
(Example)

Crystals for your future



C&amp;A Corporation

### Outline

GAGG flat wafers are highly smooth with reduced polishing marks and light scattering, making them ideal for X-ray imaging applications. Please contact us for the required sizes.

( GAGG is an oxide scintillator with high brightness and high energy resolution, and it is neither deliquescent nor self-radiating. )

### Surface roughness

Ra [ $\mu\text{m}$ ]	0.05
Rz [ $\mu\text{m}$ ]	0.3

### Option

Bonding type	① Free standing
	② Adhesive bonding
Phosphor thickness [ $\mu\text{m}$ ]	① 100~
	② 30~

### GAGG's scintillation properties \*2

Light yield [photons/MeV]	50,000 - 56,000
Energy resolution*3 (662 keV, FWHM) [%]	5-6
Decay time [ns]	92 (86%), 174 (14%)
Emission wavelength[nm]	520
Density [ $\text{g}/\text{cm}^3$ ]	6.63

\*2 All properties were measured using 5 x 5 x 5 mm<sup>3</sup> sample.

\*3 Energy resolution was measured with APD.

The measurement condition and data are at the time of evaluation and may not apply to all cases. Please consider as a reference case.