YIG ($Y_3Fe_5O_{12}$)

Product

-. Isolator Material for Near-infrared and Mid-infrared

YIG single crystals exhibit high transmittance from 1,200 nm to 4,550nm, making them extremely useful as optical devices.

-. High purity single crystal by FZ method

Grown by using the FZ method, which can be high-quality single crystal growth possible, because no impurities are introduced during growing process.

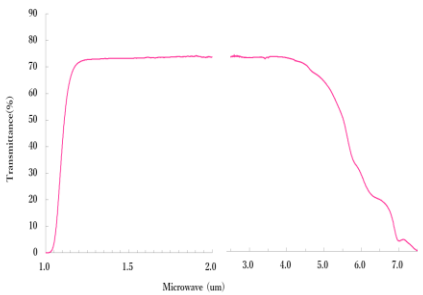
-. Substitutional Rare-earth Iron Garnet for various magneto-optical device

By controlling the saturation magnetization through substitutional single crystal YIG, it can be utilized in various magneto-optical device.

YIG (Yttrium Iron Garnet) single crystal

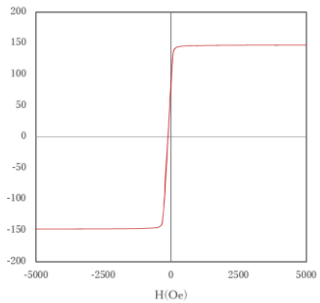
Properties

-. Crystal Structure : Cubic
-. Latice Constant : 1.24 nm
-. Density : 5.17 g/cm^3
-. Melting Point : 1555 ℃
-. Transmittance : Bulk / Uncoated
-. Saturation Magnetization: 300-1780Gauss
-. Crystal defect : Crack free, Void free



UV-Vis/FT-IR Spectrum Analysis of YIG

Sample : thickness 2mm, Double side polish, uncoated.
※The above is for reference only.



Magnetization cycle of YIG at RT

Sample : thickness 1mm, As-cut wafer
※The above is for reference only.

Specification

-. Orientation: <111> (Customizable)
-. Diameter : ~ 6 mm (Customizable)
-. Length : ~ 100 mm
-. Thickness : 0.125 ~ 2.0 mm (Customizable)
-. Surface : Single Side Polish, Double Side Polish, As cut, Lapped

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