Magneto-optical Garnets by Semiconductor-Friendly Processing Sang-Yeob Sung and Bethanie J. H. Stadler Electrical and Computer Engineering, University of Minnesota

Integration of optical isolator

- Compact size
- Optical packing with laser diode
- u Integrated photonic circuits



A wide processing window was identified for YIG grown on MgO with excellent optical quatilty.

Requirements for fabrication process

- Require low thermal process
- Substrate material that can be deposited onto semiconductor platform



X-ray diffraction pattern of garnet film which was fabricated with multi-target RF sputter system.



Publications

u S. Sung, X. Qi and B. Stadler, *APL*, vol. 87, 121111, 2005.

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