

YOW-GWO WANG

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Citizenship: **Taiwan**/ Visa Status: **F1**/ Expected Graduation Date: **Dec. 2016**

SUMMARY

- *To obtain an internship position related to R&D of EUV Lithography, especially in mask design and modeling, and actinic inspection tool development.*

SKILLS

- Programming/ Simulation: **HyperLith, Mask/Wafer aerial image simulation, Matlab, C, C++.**
- Characterization: **SEM, AFM**, Electroluminescence, Photoluminescence.
- Fabrication: E-beam lithography, ICP/RIE, PECVD, E-beam evaporation, RTA.

EDUCATION

University of California at Berkeley (UC Berkeley), USA Aug. 2012 – Dec. 2016

- PhD Student in Department of Electrical Engineering and Computer Sciences (EECS)
- Advisor: Prof. Andy Neureuther and Dr. Patrick Naulleau
- *Design, fabrication, and testing of mask/ lens concept for EUV aerial image inspection.*
- GPA: 3.83/4.0

National Chiao Tung University (NCTU), Taiwan Sep. 2009 – Jun. 2011

- M.S. in Institute of Electro-Optical Engineering
- *Leading the research project to develop world 1st GaN nanolaser at room temperature*
- Lam Research Thesis Award
- GPA: 4.0/4.0

WORK EXPERIENCE

Graduate Student Researcher, Lawrence Berkeley Laboratory (LBL) Jun. 2013 - Now

- *Design **software** has **optimized mask fracture** capability for converting arbitrary mathematical functions to mask writer input files (GDSII) for producing zoneplates.*
- ***Leading the project** on enhancing defect sensitivity of phase defects for **EUV multilayer blank inspection**. Responsible for theory development, experiment design, and data analysis.*
- ***SNR larger than 10 at focus** is achieved for multilayer defects with height about 1nm on the surface. **2-fold enhancement on SNR** has also been demonstrated by apodization in the pupil plane.*

Intern, Taiwan Semiconductor Manufacturing Company (tsmc) Jun. 2010 - Aug. 2010

- *Assist the development of fabrication process for high efficiency GaN-based LEDs.*

SELECTED PUBLICATIONS

- [1] Y. G. Wang et al., "**Zernike Phase Contrast Microscope for EUV Mask Inspection**," Proc. SPIE, Vol. 9048, 904810, (2014).
- [2] Y. G. Wang et al., "**Phase-enhanced Defect Sensitivity for EUV Mask Inspection**," Proc. SPIE, Vol. 9235, 92350L, (2014).
- [3] Y. G. Wang et al., "**Enhancing Defect Detection with Zernike Phase Contrast in EUV Multilayer Blank Inspection**," Proc. SPIE, Vol. 9422, 942247, (2015).