

Amy Wei

PERSONAL

Name: Amy (Ming-Hui) Wei
Place of Birth: China
Date of Birth: May 5, 1990

Phone: (217) 721-0938
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EDUCATION

2013-Present

Visiting Scholar LOPE laboratory at the
University of Illinois, Urbana-Champaign

2012-Present

Master of Software Engineering
Tongji University

2008-2012

Bachelor of microelectronics
Shanghai Gench University

RESEARCH AREAS

Electromagnetic field and microwave technology, integrated circuits (IC), lasers, and plasma devices.

PUBLICATIONS

[March 2013] M. H. Wei, Y. Q. Zhang, Y. Q. Wang, and M. S. Tong, "**Multi-physics Analysis for Electromagnetic Radiation by Elastic Media**," 2013 Progress in Electromagnetics Research Symposium (PIERS), Taipei, Mar. 2013. Access number: 20132216370903

[March 2013] Y. Q. Zhang, M. H. Wei, Y. R. Cao, Y. Q. Wang, and M. S. Tong, "**Electromagnetic modeling and simulation for interconnect structures based on volume-surface integral equations**," 2013 Progress in Electromagnetics Research Symposium (PIERS), Taipei, Mar. 2013. Access number: 20132216370903

[March 2013] K. Yang, Y. Q. Zhang, M. H. Wei, and M. S. Tong, "**Efficient solutions of volume integral equations with inhomogeneous materials**," Progress in Electromagnetics Research Symposium (PIERS), Taipei, Mar. 2013. Access number: 20132216371027

SKILLS AND CERTIFICATIONS

English CET band six, Computer certificate level, Computer grade II certificate

ACADEMIC PROJECTS

AUG 2013-PRESENT

Working with Prof. Gary Eden at LOPE laboratory on analyzing the propagation of microplasma.

- Designed the structure of the varying channels devices, and the structure of the plasma devices, based on the DBD structure.Finished making of the devices, tested structure and propagation of devices with the ICCD camera under the condition of 300/500/700 torr neon.
- Responsible for analyzing and comparing the propagation of the different kinds of devices under the different pressure and voltage.
- Utilizing software and equipment such as Matlab, AutoCAD, oscilloscope, micro-blaster, ICCD camera.

FEB 2012-MAY 2012

Designed a LED driver with DC-DC booster using H-Spice.

- Developed the boost converter circuit for two white LEDs.
- Designed the operational amplifier to realize the increase of the voltage,based on the bias circuits and the current mirror.
- Realized the DC-DC booster circuit with the PWM(Pulse Width Modulation),analyzing with front end of the simulation and the back-end simulation , compared the two simulations in order to improve the circuit.
- Utilizing relevant software such as HSPICE,LAKER,Cadence Virtuoso.

DEC 2010

Designed a coded lock based on the 51MCU.