Zijing Zhang

Email: zijing_zhang@hust.edu.cn

School: HuaZhong University of Science and Technology(ranks 8 in China)

Major: Optoelectronic Information and Engineering (ranks top3 in China)

Grade: senior year of undergraduate Graduate year:2019

Adcademic performance: 88.3/100 3.91/4

Research Project 1 at Georgia Institution of Technology (2018.7.1~2018.11.1):
Supervisior: **Adibi Ali**, **Professor** ,School of Electrical and Computer Engineering

- Wavelength selective infrared thermal emission mediated by magnetic polaritons from silicon carbide metasurfaces
- 2D material (Graphene, TMDCs, etc.) based integrated optoelectronics, high Q-resonators like nanodisks

Research Project 2:

- A design of broadband achromatic dielectric metalens for linear polarization in the near-infrared spectrum
- Broadband ultracompact polarimeters in infrared spectrum

  In National Laboratory for optoelectronics, Wuhan Supervisor: Prof.Zhenyu Yang

  In cooperation with Prof. Isabelle Staude in **Universität Jena, Germany**

Research Project 3:

- photonic intergrated devices design used for all-optical signal processing
- Continuously-tunable photonic fractional Hilbert Transformer based on a high birefringent planar Bragg grating in waveguide

  In cooperation with the **Optoelectronics Research Centre, University of Southampton, UK**

Publications:

- "Ultra-wideband and continuously-tunable fractional photonic Hilbert transformer based on a single high-birefringence planar Bragg grating" ***first-author*** *submitted to Optical Express* ***(under revision before acceptance)***
- "A design of broadband achromatic dielectric metalens for linear polarization in the near-infrared spectrum" ***first-author*** *submitted to Optical Letters for review*
- "Micro-machining for TE/TM mode phase matching in high-birefringence planar waveguide and implementation in continuously-tunable Fractional Hilbert transform " ***first-author*** *submitted for publication to POEM, held by OSA in November 2018*

Exchange Program

University of California, San Diego 's visiting student in 2017 Fall with **CSC scholarship**

English Proficiency

TOEFL test 101 (reading28 listening24 speaking22 writing27) GRE test V154+Q167

Awards

2018 Mathematical Contest In Modelling held by USA Meritorious Prize(the first prize)

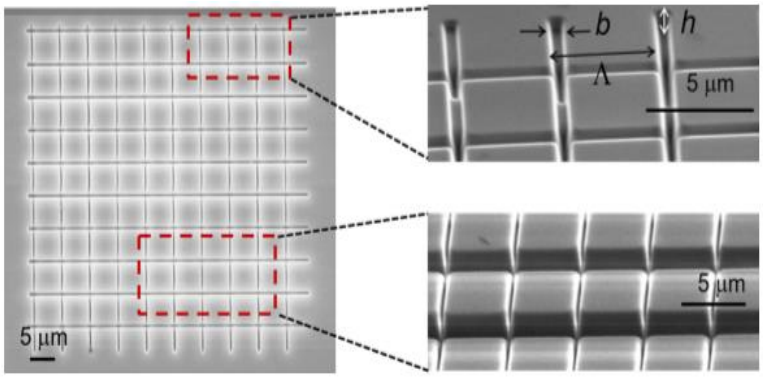
Software Skills

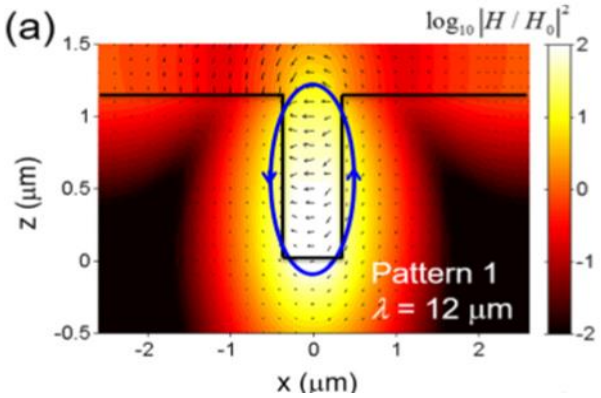
FDTD , Matlab, ZEMAX, COMSOL, C, Python, verilog, Altium Designer, Rsoft, LATEX, solidworks

Experiemental Skills

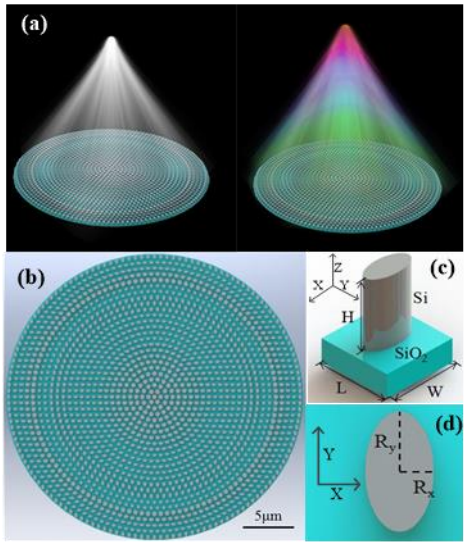
- Waveguide Fabrication, characterization, and measurement of spectrual response, etc.
  Platform techniques for integrated optoelectronics applications. Laser system experiments, calibrating, aligning and measurements.

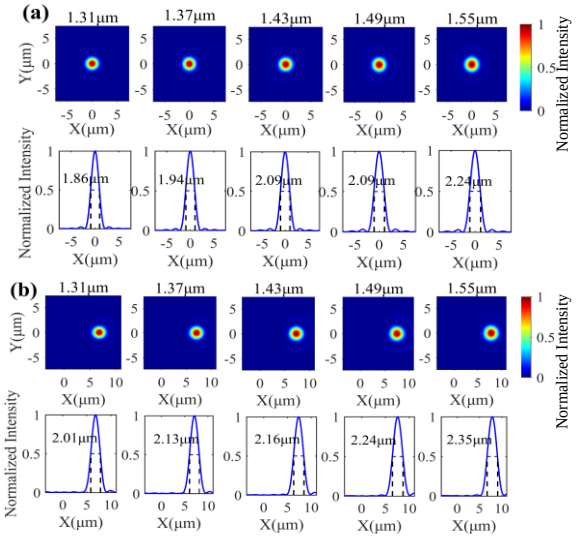
Research project 1:The design and simulation of thermal emitter metasurface based on SiC



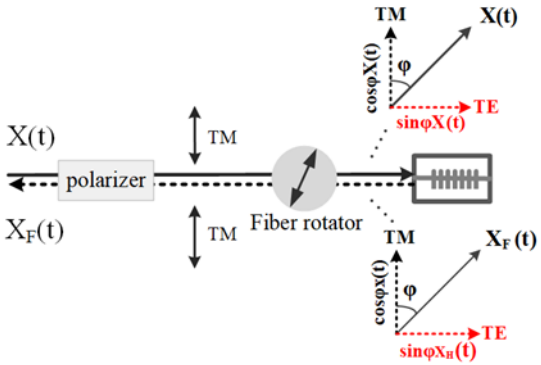


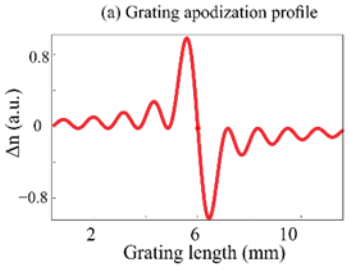
Research Project 2: the development of broadband achromatic metalens in the near-infrared region

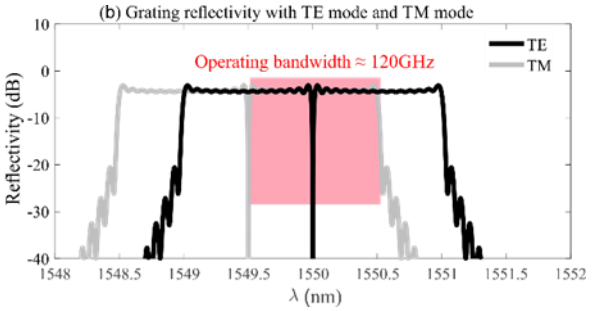


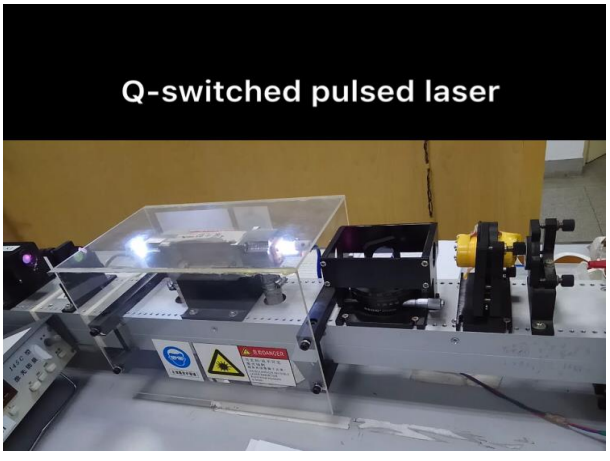


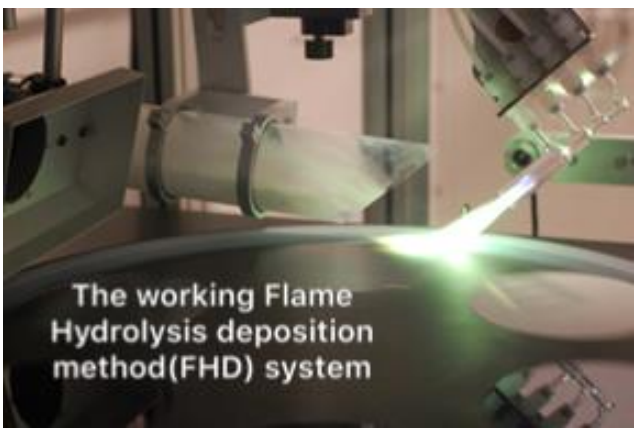
Research Project3: photonic fractional Hilbert Transformer based on a high birefringent planar Bragg grating in waveguide











華中科技大學
HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNDERGRADUATE ACADEMIC RECORD

Name: Zhang Zijing
Student ID: U201513976
Department: School of Optical and Electronic Information
Major: Opto-electronic Information Science and Engineering
Date of Entrance: 01/09/2015
Length of Schooling: 4 years

Course	Credit	Result
2015-2016 1st Semester		
Physical Education(I)	1.0	75
Engineering Graphics (I)	2.5	90
Military Training	1.0	90
Fundamentals of Ideological and Ethical Standards & Law	2.5	87
Calculus (I)	5.5	87
Introduction to Information Technology	2.0	90
Chinese	2.0	77
Program and Course Orientation	0.5	86
Comprehensive English (I)	3.5	93
2015-2016 2nd Semester		
Programming in C	3.5	79
Physics (I)	4.0	95
Probability Theory and Mathematical Statistic (III)	2.5	88
History and Development of Top American Universities	2.0	81
Volleyball (Elementary)	1.0	78
Social Practice in Ideological and Political Education	1.5	80
Calculus (I)	5.5	91
Experiment of Physics(I)	1.0	86
Linear Algebra	2.5	91
Project Management(General Elective)	2.0	72
Survey of Modern Chinese History	2.0	89
Comprehensive English(II)	3.5	89
2016-2017 1st Semester		
College Physics (II)	4.0	96
Mass Aerobics (Elementary)	1.0	94
Circuit Theory (III)	5.5	88
Complex Analysis and Integral Transformation	2.5	82
Introduction to History of Architecture	2.0	83
Military Theory	1.0	87
Basic Principles of Marxism	2.5	82
Mathematical Equations and Special Functions(I)	2.5	89
Experiment of Physics(II)	0.8	83
Signals and Linear System	3.5	91
Applied Optics	3.0	91
Applied Optics Lab	0.5	75
Appreciation of Chinese and Foreign Art	2.0	77
2016-2017 2nd Semester		
Semiconductor Optoelectronics	2.5	87
Electrodynamics	3.0	96
Electrical Skills Practice	1.0	84
Circuit Testing Lab	1.0	90
Electronic Circuit Design，Test Experiment (I)	1.0	85
Optics Project	1.0	81
Quantum Mechanics(II)	3.0	82
General Introduction to Mao Zedong Thought and Socialist Theory with Chinese Characteristics	3.5	89
Analog Electronic Technology(II)	3.5	89
Digital Circuit and Logic Design (I)	3.5	83
Taekwondo (Elementary)	1.0	84
Topics on the History of Republic of China(1912–49)	2.0	60
2017-2018 1st Semester		
Photoelectric Detection and Signal Processing	3.0	90
Physical Optics	4.5	93
Optical-Physics Lab	0.8	93
2017-2018 2nd Semester		
Solid State Physics	3.0	88
Fiber Optics	2.5	90
Laser Principles and Technology	4.0	94
Thermodynamics & Statistical Physics	2.0	84
Situation and Policy	2.0	87

Credits:120.1 Cumulative Average Grade:88.3
GPA: 3.91

----------Turn to Next Column----------

Provost:

Academic Affairs Office
Huazhong University of Science and Technology

Issue Date:28/6/2018