

Shiyu Zhou

Address: 001, Qide street, Hefei 230000, China

Phone: +86 17756200409 Email: syzhou2022@gmail.com

EDUCATION

Master of Materials and Chemical Engineering

June 2024

College of Nano Science and Technology, University of Science and Technology of China

GPA: 4.0/4.3

Thesis: "Inkjet Printing of PDMS-Based Artificial Eyes with Customizable Optical Features."

Awards: Graduate Academic Scholarship 2022, 2023 (Top 5%)

Bachelor of Material Forming and Control Engineering

June 2020

School of Materials Science and Engineering, Hefei University of Technology

Thesis: "Structure Design of Foundry Ladle Transfer Vehicle in Metal Liquid Transfer System."

Awards: National Encouragement scholarship (Top 5%), Undergraduate Scholarship

WORK EXPERIENCE

Process Integration Engineer

July 2024 - Present

ChangXin Memory Technologies

- Developed design rules for logic circuits by integrating silicon data and analyzing device performance to provide optimized layout solutions.

Graduate Research Assistant

June 2022 - June 2024

Key Laboratory of Multifunctional Nanomaterials and Smart Systems, Chinese Academy of Sciences

- Optimized ink formulations and printing parameters for large-scale PDMS microlens array fabrication via inkjet printing.
- Integrated microfluidic chips with printed microlens arrays to create tunable-focus artificial compound eyes.
- Conducted fluid-structure interaction and ray tracing simulations using finite element analysis on compound eye models.
- Designed and built an optical characterization system for microlens arrays and compound eyes.
- Developed a MATLAB program to process compound eye images and evaluate image clarity.
- Performed data analysis and contributed to scientific manuscript preparation.

PUBLICATIONS

[1] S. Zhou, H. Guo, B. Qian, L. Li, X. Shi. (2024) Single-Step Inkjet Printing PDMS Microlens Arrays for Tunable-Focus Artificial Compound Eyes. *Adv. Mater. Technol.*, 2400016.

[2] H. Guo, J. Qin, S. Zhou, B. Qian, L. Li, D. Zhu, X. Shi. (2023) A Low-Binder-Content Ink System for 3D Printing High-Density and Small Feature Size 316L Stainless Steel Parts. *Adv. Eng. Mater.*, 25 (20), 2300558.

ADDITIONAL SKILL

- 3D Printing: Inkjet 3D Printing, Direct Ink Writing, Micro-Stereolithography, Fused Deposition Modeling.
- Semiconductor device fabrication process flow and layout design.
- Microfluidic, MEMS Fabrication.
- 3D CAD Software: SolidWorks, Blender, Autodesk Inventor.
- FEA Software: COMSOL, Ansys Workbench.
- Data Processing Software: MATLAB, Origin.
- Individual And Team Work Ability.