

EDUCATION

King Abdullah University of Science and Technology (KAUST)	Saudi Arabia
<i>Ph.D. in Electrical and Computer Engineering</i>	2022 - 2027 (expected)
<ul style="list-style-type: none"> • Advisor: Prof. Wolfgang Heidrich • Research area: Computational microscopy 	
Harbin Institute of Technology (HIT)	China
<i>M.Eng. in Instrument Science and Technology</i>	2020 - 2022
<ul style="list-style-type: none"> • Rank: 1/133. • Advisor: Prof. Zhen-gang Lu • Research area: Defect detection 	
Harbin Institute of Technology (HIT)	China
<i>B.Eng. in Opto-Electronics Information Science and Engineering</i>	2016 - 2020
<ul style="list-style-type: none"> • Rank: 1/45. • Advisor: Prof. Zhengjun Liu • Research area: Fourier ptychography 	

RESEARCH INTERESTS

Computational imaging; Microscopy system; End-to-End learning; Phase retrieval

JOURNAL PUBLICATIONS

1. M. Sun, K. Wang, Y. N. Mishra, S. Qiu, W. Heidrich. Space-time Fourier ptychography for in vivo quantitative phase imaging. *Optica*, 2024. [\[Link\]](#)
2. H. Qin, M. Sun, Z. Lu, J. Tan. Metallic mesh defect detection based on low-rank decomposition via Schatten capped p norm. *IEEE Trans. Instrum. Meas.*, 2024. [\[Link\]](#)
3. Y. Li, X. Wen, M. Sun, X. Zhou, Y. Ji, G. Huang, K. Zhou, S. Liu, Z. Liu. Spectrum sampling optimization for quantitative phase imaging based on Kramers-Kronig relations. *Opt. Lett.*, 2022. [\[Link\]](#)
4. Y. Li, C. Shen, J. Tan, X. Wen, M. Sun, G. Huang, S. Liu, Z. Liu. Fast quantitative phase imaging based on Kramers-Kronig relations in space domain. *Opt. Express*, 2021. [\[Link\]](#)
5. M. Sun, Y. Li, G. Huang, J. Wang, J. Tan, S. Liu, B. Gao, Z. Liu. Self-adapting search algorithm for Fourier ptychographic microscopy. *Opt. Quantum Electron.*, 2021. [\[Link\]](#)

CONFERENCE PUBLICATIONS

1. M. Sun, K. Wang, Y. N. Mishra, S. Qiu, W. Heidrich. Dynamic Fourier ptychography via space-time optimization . *Computational Optical Sensing and Imaging (COSI)* , 2024. [\[Link\]](#)

AWARDS AND HONORS

- Best poster shortlist & Spotlight poster (ICCP 2024) 2024.07
- KAUST PhD Program Fellowship 2022.08
- Kwang-Hua Scholarship 2021.11
- First-class Academic Scholarship 2020.09, 2021.09
- Excellent Graduate of Harbin Institute of Technology 2020.06
- National Scholarship 2018.11
- First-class People's Scholarship 2018.05, 2018.11, 2020.06

SKILLS

Programming: Matlab, Python, Pytorch, C.

Computer design software: Adobe Illustrator, Blender, 3ds Max, Solidworks.

ACADEMIC SERVICES

Reviewers for: *Optics Express*

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