Personal Information

Full Name: WU Wangjiang Gender: Male

Born: March 1993 Birth Place: Linfen, Shanxi

Phone: 86-17888810958 Email: 1014910755@qq.com

Address: Southern Medical University, Guangzhou, China

Education Experience

Southern Medical University

Ph.D. in Biomedical Engineering.
 Guangzhou, China

Dissertation: "Cold-cathode Flat-panel X-ray Source based phase constrast Sep. 2021– Dec. 2025 imaging"

Capital Medical University

Beijing, China

M.S., Biomedical Engineering.
 Sep. 2016 – July 2019

• Dissertation: "CT Image Quality Assessment Based on Volumetric Data"

Capital Medical University

B.S. in Biomedical Engineering.
 Beijing, China

Dissertation: "Research and Design of Lower Limb Virtual Rehabilitation Sep. 2012 – July 2016
 Training Scene".

Work Experience

Medical Physicist, Peking University Third Hospital

Design radiotherapy treatment plans using Eclipse and Oncentra treatment
 Beijing, China planning system

• Perform patients specific plan QA. Conduct monthly quality assurance (QA)

for Linac and HDR Brachytherapy machine

Publications

Journal Articles

- 1. **Wu, W.**, Shao G. Pan, Z., et al. Reconstruction of Cold-Cathode Flat-Panel X-ray Source distribution by Coded Aperture Imaging. IEEE Transactions on Medical Imaging. (**Under Review**)
- Zhang X., Dai J., Chen J.#, Wu, W.#, and Xu Y.#, Characteristic Analysis of Anode Panel for ZnO Nanowires Cold Cathode Flat-Panel X-ray Source Using Monte Carlo Simulation, Nuclear Science and Techniques, (2024) (# co-corresponding author).
- 3. Wu, W., Qi, M., Chen, X., Zhou, Y., Pan, Z., Kang, S., Dai, J., Zhang, X., Zhou, L., Chen, J. and Xu, Y.



Feasibility Study of a Cold-cathode Flat-panel X-ray Source with Micro-array Anode Target for Grating

Interferometer Computed Tomography. IEEE Transactions on Nuclear Science. (2023)

4. Wu, W., Qu, J., Cai, J. and Yang, R. Multiresolution residual deep neural network for improving pelvic

CBCT image quality. Medical Physics, 49(3), pp.1522-1534. (2022)

5. WU, W., LI, Y., YANG, Z. Performance of multi-slice channelized Hotelling observer for low-contrast

signal detection in simulated CT data[J]. Chinese Journal of Medical Physics, 35(12):1462-1467. (2018)

Conference Proceedings

1. Shao G, Li Q, Pan Z, Chen X, Zhang X., Liu Q., Guicai Qi, Chen J., Wu W.#, Xu Y#, Zhou L#. Source

Phase Stepping for grating interferometry using Addressable Cold-Cathode Flat-Panel X-ray Source,

XNPIG 2024. (Oral Presentation, Corresponding Author)

2. Wu W., Dai J., Qi M., et al. Simulation study of a novel ZnO nanowire cold cathode flat-panel x-ray

source using EGSnrc for Talbot-Lau type grating interferometry[C]//Medical Imaging 2023: Physics of

Medical Imaging. SPIE, 2023, 12463: 47-52. (Oral Presentation + Conference Papaer)

3. Wu W., Qu J., Cai J., et al. Multi-Resolution Residual Deep Neural Network for Generating Synthetic CT

Images with High HU Accuracy and Structural Fidelity. (Oral Presentation at AAPM 2021 Virtual 63rd

Annual Meeting)

Skills

GRE: 168Q, 159V, 3.5W

• TOEFL: 96

Experienced in MATLAB, Python, C and C++