

## Sen Wang

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### Publications

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#### PUBLICATIONS

- **Empirical optimization of energy bin weights for compressing measurements with realistic photon counting x-ray detectors.** *Medical physics*  
Yang, Y., Wang, S., Pal, D., Yin, Z., Pelc, N. J., Wang, A. S.  
2023
- **Personalized CT organ noise estimation from scout images** *SPIE Medical Imaging: Physics of Medical Imaging*  
Imran, A., Pal, D., Wang, S., Dutta, S., Zucker, E., Wang, A.  
2022
- **Fast kV Switching for Improved Material Decomposition with Photon Counting X-ray Detectors**  
Wang, S., Yang, Y., Pal, D., Pelc, N. J., Wang, A. S., Zhao, W., Yu, L.  
SPIE-INT SOC OPTICAL ENGINEERING.2022
- **Empirical Optimization of Energy Bin Weights for Compressing Measurements with Photon Counting X-ray Detectors**  
Yang, Y., Wang, S., Pal, D., Pelc, N. J., Wang, A. S., Zhao, W., Yu, L.  
SPIE-INT SOC OPTICAL ENGINEERING.2022
- **Multimodal Contrastive Learning for Prospective Personalized Estimation of CT Organ Dose**  
Imran, A., Wang, S., Pal, D., Dutta, S., Zucker, E., Wang, A., Wang, L., Dou, Q., Fletcher, P. T., Speidel, S., Li, S.  
SPRINGER INTERNATIONAL PUBLISHING AG.2022: 634-643
- **Personalized CT Organ Dose Estimation from Scout Images** *International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)*  
Imran, A., Wang, S., Pal, D., Dutta, S., Patel, B., Zucker, E., Wang, A.  
2021
- **A systematic evaluation and optimization of automatic detection of ulcers in wireless capsule endoscopy on a large dataset using deep convolutional neural networks.** *Physics in medicine and biology*  
Wang, S., Xing, Y., Zhang, L., Gao, H., Zhang, H.  
2019; 64 (23): 235014
- **Deep Convolutional Neural Network for Ulcer Recognition in Wireless Capsule Endoscopy: Experimental Feasibility and Optimization** *COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE*  
Wang, S., Xing, Y., Zhang, L., Gao, H., Zhang, H.  
2019; 2019: 7546215
- **Second Glance framework (secG): Enhanced Ulcer Detection with Deep Learning on a Large Wireless Capsule Endoscopy Dataset**  
Wang, S., Xing, Y., Zhang, L., Gao, H., Zhang, H., Jiang, Chen, Z., Chen, G.  
SPIE-INT SOC OPTICAL ENGINEERING.2019
- **Systematic implementation of spectral CT with a photon counting detector for liquid security inspection** *NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT*  
Xu, X., Xing, Y., Wang, S., Zhang, L.  
2018; 893: 99–108
- **Enhanced material separation with a quasi-monochromatic CT imaging method using a photon counting detector** *NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT*

Wang, S., Xing, Y., Zhang, L., Xu, X.  
2018; 881: 9–15

- **Quasi-monochromatic imaging in x-ray CT via spectral deconvolution using photon-counting detectors** *PHYSICS IN MEDICINE AND BIOLOGY*

Wang, S., Gao, H., Zhang, L., Wu, D., Xu, X.  
2017; 62 (6): 2208–23

- **More Accurate and Less Noisy Spectral Deconvolution Strategy using Photon Counting Detectors**

Wang, S., Zhang, L., Xu, X., IEEE  
IEEE.2017

- **Preliminary Study of Quantitative X-ray Spectral Imaging with Spectral Deconvolution**

Wang, S., Zhang, L., Xu, X., Wu, D., IEEE  
IEEE.2016