Yuxiang Xing

List of Publications by Year
in descending order

77 papers	637 citations	687363 13 h-index	752698 20 g-index
77 all docs	77 docs citations	77 times ranked	604 citing authors

#	Article	IF	Citations
1	A CT image feature space (CTIS) loss for restoration with deep learning-based methods. Physics in Medicine and Biology, 2022, 67, 055010.	3.0	2
2	Reciprocal-FDK reconstruction for x-ray diffraction computed tomography. Physics in Medicine and Biology, 2022, 67, 095009.	3.0	2
3	Analytical covariance estimation for iterative CT reconstruction methods. Biomedical Physics and Engineering Express, 2022, 8, 035007.	1.2	1
4	Fourier-based interpretation and noise analysis of the moments of small-angle x-ray scattering in grating-based x-ray phase contrast imaging. Optics Express, 2021, 29, 21902.	3.4	2
5	Fluence adaptation for contrast-based dose optimization in x-ray phase-contrast imaging. Medical Physics, 2021, 48, 6106-6120.	3.0	0
6	The trigonometric orthogonality of phase-stepping curves in grating-based x-ray phase-contrast imaging: Integral property and its implications for noise optimization. Medical Physics, 2020, 47, 1189-1198.	3.0	4
7	A Model-Based Unsupervised Deep Learning Method for Low-Dose CT Reconstruction. IEEE Access, 2020, 8, 159260-159273.	4.2	6
8	Fourier Properties of Symmetric-Geometry Computed Tomography and Its Linogram Reconstruction With Neural Network. IEEE Transactions on Medical Imaging, 2020, 39, 4445-4457.	8.9	7
9	Characterization of tissue-specific pre-log Bayesian CT reconstruction by texture–dose relationship. Medical Physics, 2020, 47, 5032-5047.	3.0	6
10	Interweaving Network: A Novel Monochromatic Image Synthesis Method for a Photon-Counting Detector CT System. IEEE Access, 2020, 8, 217701-217710.	4.2	2
11	A dual-domain deep learning-based reconstruction method for fully 3D sparse data helical CT. Physics in Medicine and Biology, 2020, 65, 245030.	3.0	28
12	Stationary computed tomography with source and detector in linear symmetric geometry: Direct filtered backprojection reconstruction. Medical Physics, 2020, 47, 2222-2236.	3.0	14
13	Deep Convolutional Neural Network for Ulcer Recognition in Wireless Capsule Endoscopy: Experimental Feasibility and Optimization. Computational and Mathematical Methods in Medicine, 2019, 2019, 1-14.	1.3	43
14	DualRes-UNet: Limited Angle Artifact Reduction for Computed Tomography. , 2019, , .		3
15	Wagon Number Recognition Based on the YOLOv3 Detector. , 2019, , .		4
16	Metal artifact reduction for practical dental computed tomography by improving interpolation-based reconstruction with deep learning. Medical Physics, 2019, 46, e823-e834.	3.0	33
17	Synthesize monochromatic images in spectral CT by dual-domain deep learning. , 2019, , .		1
18	Improve 3D cone-beam CT reconstruction by slice-wise deep learning. , 2018, , .		5

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19	A Self-supervised Deep Learning Network for Low-Dose CT Reconstruction. , 2018, , .		5
20	Reduction of metal artefacts in CT with Cycle-GAN. , 2018, , .		9
21	Characterizing CT Reconstruction of Pre-log Transmission Data toward Ultra-low Dose Imaging by Texture Measures. , 2018, , .		2
22	Experimental study to optimize configurations of PCD Spectral CT. Journal of X-Ray Science and Technology, 2018, 26, 1011-1027.	1.0	0
23	Fully connected neural network for virtual monochromatic imaging in spectral computed tomography. Journal of Medical Imaging, 2018, 6, 1.	1.5	14
24	Improve angular resolution for sparse-view CT with residual convolutional neural network. , 2018, , .		17
25	CT artifact reduction via U-net CNN. , 2018, , .		15
26	Geometry calibration method for a cone‐beam <scp>CT</scp> system. Medical Physics, 2017, 44, 1692-1706.	3.0	11
27	Low-Dose Lung CT Image Restoration Using Adaptive Prior Features From Full-Dose Training Database. IEEE Transactions on Medical Imaging, 2017, 36, 2510-2523.	8.9	23
28	Dual-energy CT Reconstruction using Guided Image Filtering. , 2016, , .		0
29	An empirical material decomposition method (EMDM) for spectral CT. , 2016, , .		4
30	Multienergy CT acquisition and reconstruction with a stepped tube potential scan. Medical Physics, 2015, 42, 282-296.	3.0	23
31	A real-time tracking method based on SURF. , 2015, , .		2
32	Energy calibration studyl of CdTe detector working in time over threshold mode. , 2015, , .		0
33	Hybrid decomposition method for dual energy CT. , 2014, , .		1
34	Hybrid reconstruction method for exterior CT. , 2014, , .		2
35	A low-cost dual energy CT system with sparse data. Tsinghua Science and Technology, 2014, 19, 184-194.	6.1	4
36	Straight-Line-Trajectory-Based X-Ray Tomographic Imaging for Security Inspections: System Design, Image Reconstruction and Preliminary Results. IEEE Transactions on Nuclear Science, 2013, 60, 3955-3968.	2.0	22

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37	Dual energy CT reconstruction method for incomplete high energy data. , 2013, , .		0
38	An edge-preserving total variation denoising method for DECT image. , 2013, , .		1
39	Limited angle reconstruction with two dictionaries. , 2013, , .		2
40	A general adaptive decomposition method for multi-energy spectral CT. , 2013, , .		3
41	Multi-segment limited-angle CT reconstruction via a BM3D filter. , 2012, , .		5
42	Calibration of the error from spectrum estimation for a dual energy CT. , 2012, , .		2
43	Reducing metal artifacts by pre-processing projection data in dental CBCT with a half-size detector. , 2011, , .		4
44	Geometric calibration of cone-beam CT with a flat-panel detector. , 2011, , .		8
45	A Reconstruction Method for Dual High-Energy CT With MeV X-Rays. IEEE Transactions on Nuclear Science, 2011, 58, 537-546.	2.0	17
46	A restoration method for incomplete data in DECT. , 2011, , .		4
47	A curve-filtered FDK (C-FDK) reconstruction algorithm for circular cone-beam CT. Journal of X-Ray Science and Technology, 2011, 19, 355-371.	1.0	17
48	Recent Advance in Exact ROI/VOI Image Reconstruction. Current Medical Imaging, 2010, 6, 112-118.	0.8	10
49	Anisotropic total variation for limited-angle CT reconstruction. , 2010, , .		21
50	Motion-compensated reconstruction method based on rigid motion model with multi-object. Tsinghua Science and Technology, 2010, 15, 120-126.	6.1	8
51	An improved TV minimization algorithm for incomplete data problem in computer tomography. , 2010, , .		2
52	Theoretical noise estimation in 3D X-ray cone-beam CT reconstruction. , 2010, , .		0
53	A preliminary study of OpenCL for accelerating CT reconstruction and image recognition. , 2009, , .		6
54	ROC analysis of 3D X-ray CT performance for lesion detection. , 2009, , .		0

#	Article	IF	Citations
55	Research on ATI-CAL for accelerating FBP reconstruction. , 2009, , .		0
56	Real-Time Visualize the 3D reconstruction procedure using CUDA. , 2009, , .		0
57	An iterative reconstruction method for multiple objects with rigid motion model. , 2009, , .		0
58	A general region-of-interest image reconstruction approach with truncated Hilbert transform. Journal of X-Ray Science and Technology, 2009, 17, 135-152.	1.0	36
59	Few-View Projection Reconstruction With an Iterative Reconstruction-Reprojection Algorithm and TV Constraint. IEEE Transactions on Nuclear Science, 2009, 56, 1377-1382.	2.0	37
60	Feasibility study: Low-cost dual energy CT for security inspection. , 2009, , .		2
61	Metal artifact reduction in CT images by sinogram TV inpainting. , 2008, , .		27
62	A simulation study on basis material composition for dual energy CT imaging at high-energy level. , 2008, , .		4
63	3D region-of-interest (ROI) reconstruction from truncated data in circular cone-beam CT. , 2008, , .		0
64	A weighted FBP reconstruction for plasmasphere CT imaging. , 2008, , .		1
65	Fast imaging by a single-slice-detector helical CT. , 2008, , .		6
66	An Improved Form of Linogram Algorithm for Image Reconstruction. IEEE Transactions on Nuclear Science, 2008, 55, 552-559.	2.0	12
67	A volumetric object detection framework with dual-energy CT. , 2008, , .		3
68	Picture comparison binarization method for cosmic ray muon radiography. , 2008, , .		1
69	X-ray spectrum estimation from transmission measurements using the expectation maximization method. , 2007, , .		13
70	A free geometry fan-beam CT for peripheral ROI imaging. , 2007, , .		0
71	Bayesian reconstructions with PDE image model for emission tomography. , 2007, , .		0
72	A cone-beam tomography system with a reduced size planar detector: A backprojection-filtration reconstruction algorithm as well as numerical and practical experiments. Applied Radiation and Isotopes, 2007, 65, 1041-1047.	1.5	17

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73	An Extrapolation Method for Image Reconstruction from a Straight-line Trajectory. , 2006, , .		11
74	A New FBP-type Algorithm on Improving Feldkamp Reconstruction for Z-axially Untruncated Data from a Circular Orbit. , 2006, , .		0
75	A General Exact Method for Synthesizing Parallel-beam Projections from Cone-beam Projections by Filtered Backprojection. , 2006, , .		3
76	Channelized hotelling and human observer study of optimal smoothing in SPECT MAP reconstruction. IEEE Transactions on Nuclear Science, 2004, 51, 733-741.	2.0	37
77	Dynamic GMRF priors for MAP reconstructions. , 0, , .		0