

Lei Zhu

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/11449235/lei-zhu-publications-by-year.pdf>

Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

71
papers

2,074
citations

24
h-index

44
g-index

81
ext. papers

2,408
ext. citations

4.5
avg, IF

5.08
L-index

#	Paper	IF	Citations
71	Planning CT-guided robust and fast cone-beam CT scatter correction using a local filtration technique. <i>Medical Physics</i> , 2021 , 48, 6832-6843	4.4	0
70	Comparison of the Dosimetric Influence of Applicator Displacement on 2D and 3D Brachytherapy for Cervical Cancer Treatment. <i>Technology in Cancer Research and Treatment</i> , 2021 , 20, 15330338211041201	2.7	0
69	Fast and effective single-scan dual-energy cone-beam CT reconstruction and decomposition denoising based on dual-energy vectorization. <i>Medical Physics</i> , 2021 , 48, 4843-4856	4.4	1
68	Comparison of three undersampling approaches in computed tomography reconstruction. <i>Quantitative Imaging in Medicine and Surgery</i> , 2019 , 9, 1229-1241	3.6	2
67	Fast shading correction for cone-beam CT via partitioned tissue classification. <i>Physics in Medicine and Biology</i> , 2019 , 64, 065015	3.8	3
66	Jitter correction for transmission X-ray microscopy via measurement of geometric moments. <i>Journal of Synchrotron Radiation</i> , 2019 , 26, 1808-1814	2.4	2
65	Single-Scan Dual-Energy CT Using Primary Modulation. <i>IEEE Transactions on Medical Imaging</i> , 2018 , 37, 1799-1808	11.7	15
64	The role of off-focus radiation in scatter correction for dedicated cone beam breast CT. <i>Medical Physics</i> , 2018 , 45, 191-201	4.4	9
63	Fast shading correction for cone beam CT in radiation therapy via sparse sampling on planning CT. <i>Medical Physics</i> , 2017 , 44, 1796-1808	4.4	8
62	Pixel-wise estimation of noise statistics on iterative CT reconstruction from a single scan. <i>Medical Physics</i> , 2017 , 44, 3525-3533	4.4	4
61	X-ray scatter correction for dedicated cone beam breast CT using a forward-projection model. <i>Medical Physics</i> , 2017 , 44, 2312-2320	4.4	16
60	Image-domain non-uniformity correction for cone-beam CT 2017 ,		4
59	Virtual scatter modulation for X-ray CT scatter correction using primary modulator. <i>Journal of X-Ray Science and Technology</i> , 2017 , 25, 869-885	2.1	2
58	Noise suppression for energy-resolved CT using similarity-based non-local filtration 2016 ,		3
57	Library-based scatter correction for dedicated cone beam breast CT: a feasibility study 2016 ,		2
56	Dual energy CT with one full scan and a second sparse-view scan using structure preserving iterative reconstruction (SPIR). <i>Physics in Medicine and Biology</i> , 2016 , 61, 6684-6706	3.8	18
55	Library based x-ray scatter correction for dedicated cone beam breast CT. <i>Medical Physics</i> , 2016 , 43, 4529-4544	4.4	24

54	Local filtration based scatter correction for cone-beam CT using primary modulation. <i>Medical Physics</i> , 2016 , 43, 6199	4.4	13
53	Noise suppression for dual-energy CT via penalized weighted least-square optimization with similarity-based regularization. <i>Medical Physics</i> , 2016 , 43, 2676	4.4	29
52	Noise Suppression for Dual-Energy CT Through Entropy Minimization. <i>IEEE Transactions on Medical Imaging</i> , 2015 , 34, 2286-97	11.7	19
51	A general framework of noise suppression in material decomposition for dual-energy CT. <i>Medical Physics</i> , 2015 , 42, 4848-62	4.4	17
50	Image-domain shading correction for cone-beam CT without prior patient information. <i>Journal of Applied Clinical Medical Physics</i> , 2015 , 16, 65-75	2.3	7
49	Accelerated barrier optimization compressed sensing (ABOCS) for CT reconstruction with improved convergence. <i>Physics in Medicine and Biology</i> , 2014 , 59, 1801-14	3.8	24
48	Metal artifact correction for x-ray computed tomography using kV and selective MV imaging. <i>Medical Physics</i> , 2014 , 41, 121910	4.4	25
47	Combined iterative reconstruction and image-domain decomposition for dual energy CT using total-variation regularization. <i>Medical Physics</i> , 2014 , 41, 051909	4.4	44
46	Iterative image-domain decomposition for dual-energy CT. <i>Medical Physics</i> , 2014 , 41, 041901	4.4	79
45	Iterative CT reconstruction via minimizing adaptively reweighted total variation. <i>Journal of X-Ray Science and Technology</i> , 2014 , 22, 227-40	2.1	7
44	Joint CT/CBCT deformable registration and CBCT enhancement for cancer radiotherapy. <i>Medical Image Analysis</i> , 2013 , 17, 387-400	15.4	26
43	Single-scan energy-selective imaging on cone-beam CT: a preliminary study 2013 ,		3
42	Toward a planning scheme for emission guided radiation therapy (EGRT): FDG based tumor tracking in a metastatic breast cancer patient. <i>Medical Physics</i> , 2013 , 40, 081708	4.4	10
41	Low-dose and scatter-free cone-beam CT imaging using a stationary beam blocker in a single scan: phantom studies. <i>Computational and Mathematical Methods in Medicine</i> , 2013 , 2013, 637614	2.8	21
40	Faster STORM using compressed sensing. <i>Nature Methods</i> , 2012 , 9, 721-3	21.6	370
39	Relationship between x-ray illumination field size and flat field intensity and its impacts on x-ray imaging. <i>Medical Physics</i> , 2012 , 39, 5901-9	4.4	19
38	Emission guided radiation therapy for lung and prostate cancers: a feasibility study on a digital patient. <i>Medical Physics</i> , 2012 , 39, 7140-52	4.4	28
37	Accelerated barrier optimization compressed sensing (ABOCS) reconstruction for cone-beam CT: phantom studies. <i>Medical Physics</i> , 2012 , 39, 4588-98	4.4	68

36	Total-variation regularization based inverse planning for intensity modulated arc therapy. <i>Technology in Cancer Research and Treatment</i> , 2012 , 11, 149-62	2.7	5
35	Accelerated barrier optimization compressed sensing (ABOCS) reconstruction: Performance evaluation for cone-beam CT 2012 ,		1
34	Low-dose quantitative cone-beam CT imaging in radiation therapy 2012 ,		1
33	Low-dose and scatter-free cone-beam CT imaging: a preliminary study 2012 ,		2
32	Quantitative cone-beam CT imaging in radiation therapy using planning CT as a prior: first patient studies. <i>Medical Physics</i> , 2012 , 39, 1991-2000	4.4	56
31	Scatter correction for full-fan volumetric CT using a stationary beam blocker in a single full scan. <i>Medical Physics</i> , 2011 , 38, 6027-38	4.4	78
30	Inverse planning for IMRT with nonuniform beam profiles using total-variation regularization (TVR). <i>Medical Physics</i> , 2011 , 38, 57-66	4.4	24
29	Three-dimensional anisotropic adaptive filtering of projection data for noise reduction in cone beam CT. <i>Medical Physics</i> , 2011 , 38, 5896-909	4.4	20
28	Single-scan scatter correction for cone-beam CT using a stationary beam blocker: a preliminary study 2011 ,		2
27	Evaluation of an erbium modulator in x-ray scatter correction using primary modulation 2011 ,		2
26	Toward truly optimal IMRT dose distribution: inverse planning with voxel-specific penalty. <i>Technology in Cancer Research and Treatment</i> , 2010 , 9, 629-36	2.7	13
25	A patient set-up protocol based on partially blocked cone-beam CT. <i>Technology in Cancer Research and Treatment</i> , 2010 , 9, 191-8	2.7	8
24	Noise reduction for Multi-Harmonic Phase Analysis of gated SPECT myocardial perfusion imaging 2010 ,		1
23	In situ measurement of the bonded film thickness of Z-Tetraol lubricant on magnetic recording media. <i>Journal of Applied Physics</i> , 2010 , 108, 084907	2.5	
22	Compressed sensing based cone-beam computed tomography reconstruction with a first-order method. <i>Medical Physics</i> , 2010 , 37, 5113-25	4.4	179
21	Simulation of left ventricular dyssynchrony using the XCAT phantom 2010 ,		1
20	Optimization of system parameters for modulator design in x-ray scatter correction using primary modulation 2010 ,		9
19	Shading correction for on-board cone-beam CT in radiation therapy using planning MDCT images. <i>Medical Physics</i> , 2010 , 37, 5395-406	4.4	85

18	Scatter correction method for x-ray CT using primary modulation: phantom studies. <i>Medical Physics</i> , 2010 , 37, 934-46	4.4	56
17	Overview of X-ray Scatter in Cone-beam Computed Tomography and Its Correction Methods. <i>Current Medical Imaging</i> , 2010 , 6, 82-89	1.2	29
16	Modulator design for x-ray scatter correction using primary modulation: material selection. <i>Medical Physics</i> , 2010 , 37, 4029-37	4.4	27
15	Scatter correction for cone-beam CT in radiation therapy. <i>Medical Physics</i> , 2009 , 36, 2258-68	4.4	125
14	Direct measurement of bonded film thickness of A20H lubricant. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 95, 833-841	2.6	4
13	Noise reduction in low-dose x-ray fluoroscopy for image-guided radiation therapy. <i>International Journal of Radiation Oncology Biology Physics</i> , 2009 , 74, 637-43	4	17
12	Measurement-based scatter correction for cone-beam CT in radiation therapy 2009 ,		2
11	Search for IMRT inverse plans with piecewise constant fluence maps using compressed sensing techniques. <i>Medical Physics</i> , 2009 , 36, 1895-905	4.4	34
10	Noise suppression in scatter correction for cone-beam CT. <i>Medical Physics</i> , 2009 , 36, 741-52	4.4	83
9	Scatter correction for x-ray conebeam CT using one-dimensional primary modulation 2009 ,		6
8	Using total-variation regularization for intensity modulated radiation therapy inverse planning with field-specific numbers of segments. <i>Physics in Medicine and Biology</i> , 2008 , 53, 6653-72	3.8	44
7	A short-scan reconstruction for cone-beam CT using shift-invariant FBP and equal weighting. <i>Medical Physics</i> , 2007 , 34, 4422-38	4.4	6
6	A practical reconstruction algorithm for CT noise variance maps using FBP reconstruction 2007 ,		16
5	Improved scatter correction for x-ray conebeam CT using primary modulation 2007 ,		10
4	MTF measurement and a phantom study for scatter correction in CBCT using primary modulation 2006 ,		3
3	Scatter correction method for X-ray CT using primary modulation: theory and preliminary results. <i>IEEE Transactions on Medical Imaging</i> , 2006 , 25, 1573-87	11.7	153
2	X-ray scatter correction for cone-beam CT using moving blocker array 2005 ,		40
1	A novel method for film thickness measurement of perfluoropolyether lubricant by secondary ion mass spectroscopy. <i>Applied Surface Science</i> , 2002 , 189, 53-58	6.7	8

