

# Quanzheng Li

## List of Publications by Year in descending order

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Version: 2024-02-01

130  
papers

7,290  
citations

136885

32  
h-index

62565

80  
g-index

134  
all docs

134  
docs citations

134  
times ranked

9300  
citing authors

#	ARTICLE	IF	CITATIONS
1	Diagnostic Assessment of Deep Learning Algorithms for Detection of Lymph Node Metastases in Women With Breast Cancer. <i>JAMA - Journal of the American Medical Association</i> , 2017, 318, 2199.	3.8	2,003
2	Artificial Intelligence and Machine Learning in Radiology: Opportunities, Challenges, Pitfalls, and Criteria for Success. <i>Journal of the American College of Radiology</i> , 2018, 15, 504-508.	0.9	445
3	Federated learning for predicting clinical outcomes in patients with COVID-19. <i>Nature Medicine</i> , 2021, 27, 1735-1743.	15.2	300
4	Personalized iPSC-Derived Dopamine Progenitor Cells for Parkinson's Disease. <i>New England Journal of Medicine</i> , 2020, 382, 1926-1932.	13.9	298
5	Deep Learning-Based Image Segmentation on Multimodal Medical Imaging. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2019, 3, 162-169.	2.7	226
6	Iterative PET Image Reconstruction Using Convolutional Neural Network Representation. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 675-685.	5.4	188
7	Treadmill exercise elevates striatal dopamine D2 receptor binding potential in patients with early Parkinson's disease. <i>NeuroReport</i> , 2013, 24, 509-514.	0.6	181
8	Iterative Low-Dose CT Reconstruction With Priors Trained by Artificial Neural Network. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 2479-2486.	5.4	175
9	PET Image Reconstruction Using Deep Image Prior. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 1655-1665.	5.4	172
10	PET image denoising using unsupervised deep learning. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2019, 46, 2780-2789.	3.3	157
11	Early Diagnosis of Alzheimer's Disease Based on Resting-State Brain Networks and Deep Learning. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2019, 16, 244-257.	1.9	157
12	Penalized PET Reconstruction Using Deep Learning Prior and Local Linear Fitting. <i>IEEE Transactions on Medical Imaging</i> , 2018, 37, 1478-1487.	5.4	154
13	Exercise elevates dopamine D2 receptor in a mouse model of Parkinson's disease: In vivo imaging with [ <sup>18</sup> F]fallypride. <i>Movement Disorders</i> , 2010, 25, 2777-2784.	2.2	136
14	Neurogenetic contributions to amyloid beta and tau spreading in the human cortex. <i>Nature Medicine</i> , 2018, 24, 1910-1918.	15.2	135
15	Sparse-View Spectral CT Reconstruction Using Spectral Patch-Based Low-Rank Penalty. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 748-760.	5.4	124
16	Non-Local Means Denoising of Dynamic PET Images. <i>PLoS ONE</i> , 2013, 8, e81390.	1.1	115
17	Big data and medical research in China. <i>BMJ: British Medical Journal</i> , 2018, 360, j5910.	2.4	99
18	Attenuation correction for brain PET imaging using deep neural network based on Dixon and ZTE MR images. <i>Physics in Medicine and Biology</i> , 2018, 63, 125011.	1.6	97

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19	PET Image Reconstruction Using Information Theoretic Anatomical Priors. IEEE Transactions on Medical Imaging, 2011, 30, 537-549.	5.4	96
20	Magnetic Resonance-Guided Positron Emission Tomography Image Reconstruction. Seminars in Nuclear Medicine, 2013, 43, 30-44.	2.5	92
21	Tau and amyloid $\beta$ proteins distinctively associate to functional network changes in the aging brain. Alzheimer's and Dementia, 2017, 13, 1261-1269.	0.4	90
22	Magnetic Resonance-Based Motion Correction for Positron Emission Tomography Imaging. Seminars in Nuclear Medicine, 2013, 43, 60-67.	2.5	89
23	Gross tumor volume segmentation for head and neck cancer radiotherapy using deep dense multi-modality network. Physics in Medicine and Biology, 2019, 64, 205015.	1.6	79
24	Graph Convolutional Neural Networks For Alzheimer's Disease Classification. , 2019, 2019, 414-417.		55
25	Patlak Image Estimation From Dual Time-Point List-Mode PET Data. IEEE Transactions on Medical Imaging, 2014, 33, 913-924.	5.4	54
26	Computationally efficient deep neural network for computed tomography image reconstruction. Medical Physics, 2019, 46, 4763-4776.	1.6	47
27	Medical image segmentation based on multi-modal convolutional neural network: Study on image fusion schemes. , 2018, , .		46
28	Deep metric learning-based image retrieval system for chest radiograph and its clinical applications in COVID-19. Medical Image Analysis, 2021, 70, 101993.	7.0	46
29	<sup>18</sup> F-Alfatide II and <sup>18</sup> F-FDG Dual-Tracer Dynamic PET for Parametric, Early Prediction of Tumor Response to Therapy. Journal of Nuclear Medicine, 2014, 55, 154-160.	2.8	43
30	Nuclear Medicine and Artificial Intelligence: Best Practices for Algorithm Development. Journal of Nuclear Medicine, 2022, 63, 500-510.	2.8	43
31	Quantitative Statistical Methods for Image Quality Assessment. Theranostics, 2013, 3, 741-756.	4.6	40
32	Decoding the orientation of contrast edges from MEG evoked and induced responses. NeuroImage, 2018, 180, 267-279.	2.1	40
33	Partial volume correction for PET quantification and its impact on brain network in Alzheimer's disease. Scientific Reports, 2017, 7, 13035.	1.6	37
34	Clinical decision support for Alzheimer's disease based on deep learning and brain network. , 2016, , .		36
35	Relative role of motion and PSF compensation in whole-body oncologic PET-MR imaging. Medical Physics, 2014, 41, 042503.	1.6	35
36	A Spectral Graph Regression Model for Learning Brain Connectivity of Alzheimer's Disease. PLoS ONE, 2015, 10, e0128136.	1.1	35

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37	Dynamic PET and Optical Imaging and Compartment Modeling using a Dual-labeled Cyclic RGD Peptide Probe. <i>Theranostics</i> , 2012, 2, 746-756.	4.6	34
38	Matched signal detection on graphs: Theory and application to brain imaging data classification. <i>NeuroImage</i> , 2016, 125, 587-600.	2.1	34
39	Deep learning-enabled system for rapid pneumothorax screening on chest CT. <i>European Journal of Radiology</i> , 2019, 120, 108692.	1.2	34
40	Self-Supervised Dynamic CT Perfusion Image Denoising With Deep Neural Networks. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021, 5, 350-361.	2.7	32
41	Consensus Neural Network for Medical Imaging Denoising with Only Noisy Training Samples. <i>Lecture Notes in Computer Science</i> , 2019, , 741-749.	1.0	32
42	Severity and Consolidation Quantification of COVID-19 From CT Images Using Deep Learning Based on Hybrid Weak Labels. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 3529-3538.	3.9	31
43	Localizing Sources of Brain Disease Progression with Network Diffusion Model. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2016, 10, 1214-1225.	7.3	30
44	National Electrical Manufacturers Association and Clinical Evaluation of a Novel Brain PET/CT Scanner. <i>Journal of Nuclear Medicine</i> , 2016, 57, 646-652.	2.8	29
45	Automated Semantic Segmentation of Red Blood Cells for Sickle Cell Disease. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 3095-3102.	3.9	29
46	Four-Dimensional Modeling of fMRI Data via Spatio-temporal Convolutional Neural Networks (ST-CNNs). <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2020, 12, 451-460.	2.6	28
47	Iterative Image Reconstruction Using Inverse Fourier Rebinning for Fully 3-D PET. <i>IEEE Transactions on Medical Imaging</i> , 2007, 26, 745-756.	5.4	27
48	PET Image Deblurring and Super-Resolution With an MR-Based Joint Entropy Prior. <i>IEEE Transactions on Computational Imaging</i> , 2019, 5, 530-539.	2.6	27
49	Pulmonary imaging using respiratory motion compensated simultaneous PET/MR. <i>Medical Physics</i> , 2015, 42, 4227-4240.	1.6	26
50	A multi-center study of COVID-19 patient prognosis using deep learning-based CT image analysis and electronic health records. <i>European Journal of Radiology</i> , 2021, 139, 109583.	1.2	26
51	Functional Neuroimaging in the New Era of Big Data. <i>Genomics, Proteomics and Bioinformatics</i> , 2019, 17, 393-401.	3.0	25
52	Classification of Exacerbation Frequency in the COPD Gene Cohort Using Deep Learning With Deep Belief Networks. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 1805-1813.	3.9	24
53	Deep learning combined with radiomics may optimize the prediction in differentiating high-grade lung adenocarcinomas in ground glass opacity lesions on CT scans. <i>European Journal of Radiology</i> , 2020, 129, 109150.	1.2	24
54	Low-dose CT reconstruction using spatially encoded nonlocal penalty. <i>Medical Physics</i> , 2017, 44, e376-e390.	1.6	23

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55	Predicting Alzheimer's Disease by Hierarchical Graph Convolution from Positron Emission Tomography Imaging. , 2019, , .		23
56	MR-Based Attenuation Correction for Brain PET Using 3-D Cycle-Consistent Adversarial Network. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 185-192.	2.7	22
57	Artificial intelligence for stepwise diagnosis and monitoring of COVID-19. European Radiology, 2022, 32, 2235-2245.	2.3	22
58	Direct Reconstruction of Linear Parametric Images From Dynamic PET Using Nonlocal Deep Image Prior. IEEE Transactions on Medical Imaging, 2022, 41, 680-689.	5.4	21
59	Low-dose CT reconstruction with Noise2Noise network and testing-time fine-tuning. Medical Physics, 2021, 48, 7657-7672.	1.6	21
60	The Evolution of Image Reconstruction in PET. PET Clinics, 2021, 16, 533-542.	1.5	20
61	RBC Semantic Segmentation for Sickle Cell Disease Based on Deformable U-Net. Lecture Notes in Computer Science, 2018, , 695-702.	1.0	20
62	Sulcal set optimization for cortical surface registration. NeuroImage, 2010, 50, 950-959.	2.1	19
63	Cognitive Assessment Prediction in Alzheimer's Disease by Multi-Layer Multi-Target Regression. Neuroinformatics, 2018, 16, 285-294.	1.5	19
64	A Graph Gaussian Embedding Method for Predicting Alzheimer's Disease Progression With MEG Brain Networks. IEEE Transactions on Biomedical Engineering, 2021, 68, 1579-1588.	2.5	19
65	EMnet: an unrolled deep neural network for PET image reconstruction. , 2019, , .		19
66	Statistical Modeling and Reconstruction of Randoms Precorrected PET Data. IEEE Transactions on Medical Imaging, 2006, 25, 1565-1572.	5.4	18
67	A graph theoretical regression model for brain connectivity learning of Alzheimer'S disease. , 2013, , .		18
68	Direct reconstruction of cardiac PET kinetic parametric images using a preconditioned conjugate gradient approach. Medical Physics, 2013, 40, 102501.	1.6	18
69	Iterative material decomposition for spectral CT using self-supervised Noise2Noise prior. Physics in Medicine and Biology, 2021, 66, 155013.	1.6	17
70	A new Graph Gaussian embedding method for analyzing the effects of cognitive training. PLoS Computational Biology, 2020, 16, e1008186.	1.5	16
71	Populational and individual information based PET image denoising using conditional unsupervised learning. Physics in Medicine and Biology, 2021, 66, 155001.	1.6	15
72	Penalized-Likelihood PET Image Reconstruction Using 3D Structural Convolutional Sparse Coding. IEEE Transactions on Biomedical Engineering, 2022, 69, 4-14.	2.5	15

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73	Characteristics of Cognitive Deficit in Amnesic Mild Cognitive Impairment With Subthreshold Depression. <i>Journal of Geriatric Psychiatry and Neurology</i> , 2019, 32, 344-353.	1.2	14
74	Attenuation correction using deep Learning and integrated UTE/multi-echo Dixon sequence: evaluation in amyloid and tau PET imaging. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2021, 48, 1351-1361.	3.3	14
75	Arterial spin labeling MR image denoising and reconstruction using unsupervised deep learning. <i>NMR in Biomedicine</i> , 2022, 35, e4224.	1.6	13
76	A Review of Deep Learning Methods for Compressed Sensing Image Reconstruction and Its Medical Applications. <i>Electronics (Switzerland)</i> , 2022, 11, 586.	1.8	13
77	Direct estimation from list-mode data for reversible tracers using graphical modeling. , 2015, , .		12
78	MRâ€¢based PET attenuation correction using a combined ultrashort echo time/multiâ€¢echo Dixon acquisition. <i>Medical Physics</i> , 2020, 47, 3064-3077.	1.6	12
79	Deep Learning-Based Four-Region Lung Segmentation in Chest Radiography for COVID-19 Diagnosis. <i>Diagnostics</i> , 2022, 12, 101.	1.3	12
80	CT-guided PET parametric image reconstruction using deep neural network without prior training data. , 2019, , .		11
81	Direct patlak reconstruction from dynamic PET using unsupervised deep learning. , 2019, , .		10
82	Sparse Representation-Based Denoising for High-Resolution Brain Activation and Functional Connectivity Modeling: A Task fMRI Study. <i>IEEE Access</i> , 2020, 8, 36728-36740.	2.6	9
83	Respiratory motion compensation in simultaneous PET/MR using a maximum a posteriori approach. , 2013, , .		8
84	Characterization of Brain Iron Deposition Pattern and Its Association With Genetic Risk Factor in Alzheimerâ€™s Disease Using Susceptibility-Weighted Imaging. <i>Frontiers in Human Neuroscience</i> , 2021, 15, 654381.	1.0	8
85	Left Ventricle Quantification Challenge: A Comprehensive Comparison and Evaluation of Segmentation and Regression for Mid-Ventricular Short-Axis Cardiac MR Data. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 3541-3553.	3.9	8
86	Rapid high-quality PET Patlak parametric image generation based on direct reconstruction and temporal nonlocal neural network. <i>NeuroImage</i> , 2021, 240, 118380.	2.1	8
87	End-to-end deep learning for interior tomography with low-dose x-ray CT. <i>Physics in Medicine and Biology</i> , 2022, 67, 115001.	1.6	8
88	PET point spread function modeling and image deblurring using a PET/MRI joint entropy prior. , 2015, , .		7
89	Gold classification of COPD Gene cohort based on deep learning. , 2016, , .		7
90	Low-dose dual energy CT image reconstruction using non-local deep image prior. , 2019, , .		7

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91	Dual-time-point Patlak estimation from list mode PET data. , 2012, , .		6
92	Multi-label Detection and Classification of Red Blood Cells in Microscopic Images. , 2020, , .		6
93	Unsupervised PET logan parametric image estimation using conditional deep image prior. Medical Image Analysis, 2022, 80, 102519.	7.0	6
94	Joint estimation of activity image and attenuation sinogram using time-of-flight positron emission tomography data consistency condition filtering. Journal of Medical Imaging, 2017, 4, 023502.	0.8	5
95	ASCNET: Adaptive-Scale Convolutional Neural Networks for Multi-Scale Feature Learning. , 2020, , .		5
96	Spatially varying regularization for motion compensated PET reconstruction. , 2012, , .		4
97	Numerical observer for atherosclerotic plaque classification in spectral computed tomography. Journal of Medical Imaging, 2016, 3, 035501.	0.8	4
98	AF-SEG: An Annotation-Free Approach for Image Segmentation by Self-Supervision and Generative Adversarial Network. , 2020, , .		4
99	IFGAN: Missing Value Imputation using Feature-specific Generative Adversarial Networks. , 2020, , .		4
100	Ms-Gwnn: Multi-Scale Graph Wavelet Neural Network for Breast Cancer Diagnosis. , 2022, , .		4
101	4D numerical observer for lesion detection in respiratory-gated PET. Medical Physics, 2014, 41, 102504.	1.6	3
102	Penalized direct estimation of parametric images in PET. , 2015, , .		3
103	Direct parametric imaging of reversible tracers using partial dynamic data. , 2016, , .		3
104	Population and individual information guided PET image denoising using deep neural network. , 2019, , .		3
105	Clinically Translatable Direct Patlak Reconstruction from Dynamic PET with Motion Correction Using Convolutional Neural Network. Lecture Notes in Computer Science, 2020, , 793-802.	1.0	3
106	Constrained mixture modeling for the estimation of kinetic parameters in dynamic PET. , 2012, , .		2
107	A novel approach to assess the treatment response using Gaussian random field in PET. Medical Physics, 2016, 43, 833-842.	1.6	2
108	Subject-specific brain tumor growth modelling via an efficient Bayesian inference framework. , 2018, 10574, .		2

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109	Time of flight PET reconstruction using nonuniform update for regional recovery uniformity. Medical Physics, 2019, 46, 649-664.	1.6	2
110	A nonlocal averaging technique for kinetic parameter estimation from dynamic PET data. , 2011, , .		1
111	Quantitative Methods for Molecular Diagnostic and Therapeutic Imaging. Theranostics, 2013, 3, 729-730.	4.6	1
112	A novel approach to the assessment of treatment response based on Gaussian random field. , 2014, , .		1
113	Penalized PET Reconstruction using CNN Prior. , 2017, , .		1
114	Penalized Parametric PET Image Estimation Using Local Linear Fitting. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 750-758.	2.7	1
115	Annotation-Free Gliomas Segmentation Based on a Few Labeled General Brain Tumor Images. , 2020, , .		1
116	Risk assessment for acute kidney injury and death among new COVID-19 positive adult patients without chronic kidney disease: retrospective cohort study among three US hospitals. BMJ Open, 2022, 12, e053635.	0.8	1
117	Connectivity-based Cortical Parcellation via Contrastive Learning on Spatial-Graph Convolution. BME Frontiers, 2022, 2022, .	2.2	1
118	Accuracy of respiratory motion compensated image reconstruction using 4DPET-derived deformation fields. , 2014, , .		0
119	Fast estimation of image variance for time-of-flight PET reconstruction. , 2015, , .		0
120	Dual-energy CT Reconstruction using Guided Image Filtering. , 2016, , .		0
121	Image deblurring using a joint entropy prior in x-ray luminescence computed tomography. Proceedings of SPIE, 2017, , .	0.8	0
122	Multi-Materials Decomposition using clinical Dualenergy CT. , 2017, , .		0
123	HOSVD-Based Multigraph Cuts for Joint Segmentation of Multi-Channel Images. , 2017, , .		0
124	P3&#x2013;090: JOINT DEBLURRING OF LONGITUDINAL DIFFERENTIAL PET IMAGES OF TAU. Alzheimer's and Dementia, 2018, 14, P1100.	0.4	0
125	IC&#x2013;P&#x2013;203: JOINT DEBLURRING OF LONGITUDINAL DIFFERENTIAL PET IMAGES OF TAU. Alzheimer's and Dementia, 2018, 14, P167.	0.4	0
126	Multi-Size Computer-Aided Diagnosis Of Positron Emission Tomography Images Using Graph Convolutional Networks. , 2019, , .		0



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127	A novel automatic hyper-parameter estimation for penalized PET reconstruction. , 2019, , .		0
128	A new stochastic graph embedding method for Alzheimer's disease early-stage prediction and intervention evaluation. Alzheimer's and Dementia, 2020, 16, e047329.	0.4	0
129	Improved Patlak Reconstruction from Low-dose Dynamic PET Using Temporal Non-local Neural Network. , 2020, , .		0
130	Joint Attention for Medical Image Segmentation. , 2022, , .		0