Chi Liu

List of Publications by Year
in descending order

82 papers	1,784 citations	236612 25 h-index	301761 39 g-index
82 all docs	82 docs citations	82 times ranked	1525 citing authors

#	Article	IF	Citations
1	The impact of respiratory motion on tumor quantification and delineation in static PET/CT imaging. Physics in Medicine and Biology, 2009, 54, 7345-7362.	1.6	208
2	Quiescent period respiratory gating for PET/CT. Medical Physics, 2010, 37, 5037-5043.	1.6	94
3	An investigation of quantitative accuracy for deep learning based denoising in oncological PET. Physics in Medicine and Biology, 2019, 64, 165019.	1.6	90
4	Deep learning-based attenuation map generation for myocardial perfusion SPECT. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 2383-2395.	3.3	75
5	Respiratory motion correction for quantitative PET/CT using all detected events with internal-external motion correlation. Medical Physics, 2011, 38, 2715-2723.	1.6	64
6	Respiratory Motion Compensation for PET/CT with Motion Information Derived from Matched Attenuation-Corrected Gated PET Data. Journal of Nuclear Medicine, 2018, 59, 1480-1486.	2.8	54
7	Artificial Intelligence-Based Image Enhancement in PET Imaging. PET Clinics, 2021, 16, 553-576.	1.5	49
8	List-mode reconstruction for the Biograph mCT with physics modeling and event-by-event motion correction. Physics in Medicine and Biology, 2013, 58, 5567-5591.	1.6	47
9	InÂVivo Reactive Oxygen Species Detection With a Novel Positron Emission Tomography Tracer, 18F-DHMT, Allows for Early Detection of Anthracycline-Induced Cardiotoxicity in Rodents. JACC Basic To Translational Science, 2018, 3, 378-390.	1.9	46
10	Data-driven event-by-event respiratory motion correction using TOF PET list-mode centroid of distribution. Physics in Medicine and Biology, 2017, 62, 4741-4755.	1.6	44
11	Nuclear Medicine and Artificial Intelligence: Best Practices for Algorithm Development. Journal of Nuclear Medicine, 2022, 63, 500-510.	2.8	43
12	Event-by-Event Continuous Respiratory Motion Correction for Dynamic PET Imaging. Journal of Nuclear Medicine, 2016, 57, 1084-1090.	2.8	39
13	DuDoDR-Net: Dual-domain data consistent recurrent network for simultaneous sparse view and metal artifact reduction in computed tomography. Medical Image Analysis, 2022, 75, 102289.	7.0	37
14	High Single Doses of Radiation May Induce Elevated Levels of Hypoxia in Early-Stage Non-Small Cell Lung Cancer Tumors. International Journal of Radiation Oncology Biology Physics, 2018, 102, 174-183.	0.4	36
15	Anatomy-guided multimodal registration by learning segmentation without ground truth: Application to intraprocedural CBCT/MR liver segmentation and registration. Medical Image Analysis, 2021, 71, 102041.	7.0	36
16	Limited View Tomographic Reconstruction Using a Cascaded Residual Dense Spatial-Channel Attention Network With Projection Data Fidelity Layer. IEEE Transactions on Medical Imaging, 2021, 40, 1792-1804.	5.4	35
17	Quantification of myocardial blood flow with 82Rb: Validation with 15O-water using time-of-flight and point-spread-function modeling. EJNMMI Research, 2016, 6, 68.	1.1	34
18	Direct Attenuation Correction Using Deep Learning for Cardiac SPECT: A Feasibility Study. Journal of Nuclear Medicine, 2021, 62, 1645-1652.	2.8	34

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19	Non-Rigid Event-by-Event Continuous Respiratory Motion Compensated List-Mode Reconstruction for PET. IEEE Transactions on Medical Imaging, 2018, 37, 504-515.	5.4	33
20	Data-driven voluntary body motion detection and non-rigid event-by-event correction for static and dynamic PET. Physics in Medicine and Biology, 2019, 64, 065002.	1.6	32
21	Imaging Vessel Wall Biology to Predict Outcome in Abdominal Aortic Aneurysm. Circulation: Cardiovascular Imaging, 2015, 8, .	1.3	31
22	End-expiration respiratory gating for a high-resolution stationary cardiac SPECT system. Physics in Medicine and Biology, 2014, 59, 6267-6287.	1.6	30
23	CT-free attenuation correction for dedicated cardiac SPECT using a 3D dual squeeze-and-excitation residual dense network. Journal of Nuclear Cardiology, 2022, 29, 2235-2250.	1.4	29
24	Eventâ€byâ€event respiratory motion correction for PET with 3D internalâ€1D external motion correlation. Medical Physics, 2013, 40, 112507.	1.6	27
25	Scatter and crosstalk corrections for ^{99m}Tc/¹²³I dualâ€radionuclide imaging using a CZT SPECT system with pinhole collimators. Medical Physics, 2015, 42, 6895-6911.	1.6	26
26	Deep Efficient End-to-End Reconstruction (DEER) Network for Few-View Breast CT Image Reconstruction. IEEE Access, 2020, 8, 196633-196646.	2.6	26
27	Noise reduction with cross-tracer and cross-protocol deep transfer learning for low-dose PET. Physics in Medicine and Biology, 2020, 65, 185006.	1.6	26
28	Diagnostic accuracy of stress-only myocardial perfusion SPECT improved by deep learning. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 2793-2800.	3.3	23
29	MDPET: A Unified Motion Correction and Denoising Adversarial Network for Low-Dose Gated PET. IEEE Transactions on Medical Imaging, 2021, 40, 3154-3164.	5.4	22
30	Direct and indirect strategies of deep-learning-based attenuation correction for general purpose and dedicated cardiac SPECT. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 3046-3060.	3.3	22
31	Prediction of post-radiotherapy locoregional progression in HPV-associated oropharyngeal squamous cell carcinoma using machine-learning analysis of baseline PET/CT radiomics. Translational Oncology, 2021, 14, 100906.	1.7	19
32	Optimized and Automated Radiosynthesis of [18F]DHMT for Translational Imaging of Reactive Oxygen Species with Positron Emission Tomography. Molecules, 2016, 21, 1696.	1.7	18
33	Nuclear cardiology in the context of multimodality imaging to detect cardiac toxicity from cancer therapeutics: Established and emerging methods. Journal of Nuclear Cardiology, 2020, 27, 1210-1224.	1.4	18
34	Automatic Inter-Frame Patient Motion Correction for Dynamic Cardiac PET Using Deep Learning. IEEE Transactions on Medical Imaging, 2021, 40, 3293-3304.	5.4	18
35	A Novel Loss Function Incorporating Imaging Acquisition Physics for PET Attenuation Map Generation Using Deep Learning. Lecture Notes in Computer Science, 2019, , 723-731.	1.0	18
36	The impact of system matrix dimension on small FOV SPECT reconstruction with truncated projections. Medical Physics, 2015, 43, 213-224.	1.6	17

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37	Quantitative Analysis of Dynamic ¹²³I-mIBG SPECT Imaging Data in Healthy Humans with a Population-Based Metabolite Correction Method. Journal of Nuclear Medicine, 2016, 57, 1226-1232.	2.8	17
38	Generation of parametric K_i images for FDG PET using two 5â€min scans. Medical Physics, 2021, 48, 5219-5231.	1.6	16
39	DuDoUFNet: Dual-Domain Under-to-Fully-Complete Progressive Restoration Network for Simultaneous Metal Artifact Reduction and Low-Dose CT Reconstruction. IEEE Transactions on Medical Imaging, 2022, 41, 3587-3599.	5.4	15
40	Post-reconstruction attenuation correction for SPECT myocardium perfusion imaging facilitated by deep learning-based attenuation map generation. Journal of Nuclear Cardiology, 2022, 29, 2881-2892.	1.4	13
41	Cross-vender, cross-tracer, and cross-protocol deep transfer learning for attenuation map generation of cardiac SPECT. Journal of Nuclear Cardiology, 2022, 29, 3379-3391.	1.4	13
42	Noise suppressed partial volume correction for cardiac SPECT/CT. Medical Physics, 2016, 43, 5225-5239.	1.6	12
43	Generation of synthetic PET images of synaptic density and amyloid from ¹⁸Fâ€FDG images using deep learning. Medical Physics, 2021, 48, 5115-5129.	1.6	12
44	Computed Tomographic Angiography Assessment of Epicardial Coronary Vasoreactivity for Early Detection of Doxorubicin-Induced Cardiotoxicity. JACC: CardioOncology, 2020, 2, 207-219.	1.7	11
45	Unsupervised inter-frame motion correction for whole-body dynamic PET using convolutional long short-term memory in a convolutional neural network. Medical Image Analysis, 2022, 80, 102524.	7.0	11
46	Quantification of intramyocardial blood volume with 99mTc-RBC SPECT-CT imaging: A preclinical study. Journal of Nuclear Cardiology, 2018, 25, 2096-2111.	1.4	10
47	FDG PET imaging of vascular inflammation in post-traumatic stress disorder: A pilot caseâ€“control study. Journal of Nuclear Cardiology, 2021, 28, 688-694.	1.4	10
48	Direct image-based attenuation correction using conditional generative adversarial network for SPECT myocardial perfusion imaging. , 2021, 11600, .		10
49	PET respiratory motion correction: quo vadis?. Physics in Medicine and Biology, 2022, 67, 03TR02.	1.6	10
50	A personalized deep learning denoising strategy for low-count PET images. Physics in Medicine and Biology, 2022, 67, 145014.	1.6	10
51	Direct EM reconstruction of kinetic parameters from list-mode cardiac PET. , 2014, , .		9
52	Deep-learning-based methods of attenuation correction for SPECT and PET. Journal of Nuclear Cardiology, 2023, 30, 1859-1878.	1.4	9
53	Patient motion correction for dynamic cardiac PET: Current status and challenges. Journal of Nuclear Cardiology, 2020, 27, 1999-2002.	1.4	7
54	Direct List Mode Parametric Reconstruction for Dynamic Cardiac SPECT. IEEE Transactions on Medical Imaging, 2020, 39, 119-128.	5.4	7

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55	A blind deconvolution method incorporated with anatomicalâ€based filtering for partial volume correction: Validations with ¹²³Iâ€mIBG cardiac SPECT/CT. Medical Physics, 2017, 44, 6435-6446.	1.6	6
56	Investigation of Sub-Centimeter Lung Nodule Quantification for Low-Dose PET. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 41-50.	2.7	6
57	Pitfalls on PET/CT Due to Artifacts and Instrumentation. Seminars in Nuclear Medicine, 2021, 51, 646-656.	2.5	6
58	PET Image Denoising Using a Deep-Learning Method for Extremely Obese Patients. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 766-770.	2.7	6
59	Event-by-event respiratory motion correction for PET with 3-Dimensional internal-external motion correlation. , 2012, , .		5
60	Simplified Quantification and Acquisition Protocol for ¹²³I-MIBG Dynamic SPECT. Journal of Nuclear Medicine, 2018, 59, 1574-1580.	2.8	5
61	Deep Learning based Respiratory Pattern Classification and Applications in PET/CT Motion Correction. , 2019, , .		5
62	Feasibility study of PET dynamic imaging of [18F]DHMT for quantification of reactive oxygen species in the myocardium of large animals. Journal of Nuclear Cardiology, 2022, 29, 216-225.	1.4	5
63	Accuracy of arterial [18F]-Fluorodeoxyglucose uptake quantification: A kinetic modeling study. Journal of Nuclear Cardiology, 2020, 27, 1578-1581.	1.4	5
64	Increasing angular sampling through deep learning for stationary cardiac SPECT image reconstruction. Journal of Nuclear Cardiology, 2023, 30, 86-100.	1.4	5
65	Deep-Learning-Based Few-Angle Cardiac SPECT Reconstruction Using Transformer. IEEE Transactions on Radiation and Plasma Medical Sciences, 2023, 7, 33-40.	2.7	5
66	Guidelines on Setting Up Stations for Remote Viewing of Nuclear Medicine and Molecular Imaging Studies During COVID-19. Journal of Nuclear Medicine Technology, 2021, 49, 2-6.	0.4	4
67	Data-driven respiratory motion estimation and correction using TOF PET list-mode centroid of distribution. , 2014, , .		3
68	Standardization and quantification is a key to the future of atherosclerosis FDG PET/CT imaging. Journal of Nuclear Cardiology, 2021, 28, 1360-1363.	1.4	3
69	Anger recall mental stress decreases 123I-metaiodobenzylguanidine (123I-MIBG) uptake and increases heterogeneity of cardiac sympathetic activity in the myocardium in patients with ischemic cardiomyopathy. Journal of Nuclear Cardiology, 2022, 29, 798-809.	1.4	3
70	Assessment of patient selection criteria for quantitative imaging with respiratory-gated positron emission tomography. Journal of Medical Imaging, 2014, 1, 026001.	0.8	2
71	Investigation of using anatomical knowledge in PET imaging of sub-centimeter lung nodules. , 2015, , .		2
72	Multi-Tracer Positron Emission Tomography Quantification of Sympathetic Innervation. JACC: Cardiovascular Imaging, 2021, 14, 1437-1439.	2.3	2

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73	Accounting for Breathing Pattern Variability in Event-by-Event Respiratory Motion Correction in PET Using Dynamic Internal-External Motion Correlation. , 2017, , .		1
74	GPU-based List-mode Direct Parametric Reconstruction for Dynamic Cardiac SPECT. , 2017, , .		1
75	Performance Evaluation of Amplitude and Phase Respiratory Gating Methods on Continuous-Bed-Motion Whole-Body PET Studies. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 415-420.	2.7	1
76	Cutaneous Toxicity in a Laboratory Beagle () after Chronic Administration of Doxorubicin Hydrochloride. Comparative Medicine, 2018, 68, 56-62.	0.4	1
77	Respiratory gating for a stationary dedicated cardiac SPECT system. , 2011, , .		0
78	3D molecular breast imaging using a high-resolution dedicated cardiac SPECT camera. , 2013, , .		0
79	Monte Carlo simulations of the GE discovery alcyone CZT SPECT system. , 2014, , .		0
80	Strategies to Improve Direct EM Patlak Reconstructions. , 2017, , .		0
81	Abstract 19973: Dynamic Thallium-201 SPECT/CT Provides Quantitative Index of Myocardial Flow and Viability: Validation in Porcine Post-Myocardial Infarction Model. Circulation, 2014, 130, .	1.6	0
82	Data Management and Network Architecture Effect on Performance Variability in Direct Attenuation Correction via Deep Learning for Cardiac SPECT: A Feasibility Study. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 755-765.	2.7	0