John Aldo Lee

List of Publications by Year
in descending order

104 papers	4,335 citations	126907 33 h-index	114465 63 g-index
107 all docs	107 docs citations	107 times ranked	4121 citing authors

#	Article	IF	Citations
1	Tuning Database-Friendly Random Projection Matrices for Improved Distance Preservation on Specific Data. Applied Intelligence, 2022, 52, 4927-4939.	5.3	1
2	Fast Multiscale Neighbor Embedding. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1546-1560.	11.3	6
3	Towards a safe and efficient clinical implementation of machine learning in radiation oncology by exploring model interpretability, explainability and data-model dependency. Physics in Medicine and Biology, 2022, 67, 11TR01.	3.0	21
4	SQuadMDS: A lean Stochastic Quartet MDS improving global structure preservation in neighbor embedding like t-SNE and UMAP. Neurocomputing, 2022, 503, 17-27.	5.9	1
5	Deep learning dose prediction for IMRT of esophageal cancer: The effect of data quality and quantity on model performance. Physica Medica, 2021, 83, 52-63.	0.7	29
6	Artificial intelligence and machine learning for medical imaging: A technology review. Physica Medica, 2021, 83, 242-256.	0.7	135
7	Domain adversarial networks and intensity-based data augmentation for male pelvic organ segmentation in cone beam CT. Computers in Biology and Medicine, 2021, 131, 104269.	7.0	27
8	Introducing a probabilistic definition of the target in a robust treatment planning framework. Physics in Medicine and Biology, 2021, 66, 155008.	3.0	1
9	Denoising proton therapy Monte Carlo dose distributions in multiple tumor sites: A comparative neural networks architecture study. Physica Medica, 2021, 89, 93-103.	0.7	7
10	Incorporation of tumor motion directionality in margin recipe: The directional MidP strategy. Physica Medica, 2021, 91, 43-53.	0.7	3
11	A noise correction of the γ â€index method for Monte Carlo dose distribution comparison. Medical Physics, 2020, 47, 681-692.	3.0	8
12	Accelerated robust optimization algorithm for proton therapy treatment planning. Medical Physics, 2020, 47, 2746-2754.	3.0	9
13	Cross-Domain Data Augmentation for Deep-Learning-Based Male Pelvic Organ Segmentation in Cone Beam CT. Applied Sciences (Switzerland), 2020, 10, 1154.	2.5	13
14	Improvement of kilovoltage intrafraction monitoring accuracy through gantry angles selection. Biomedical Physics and Engineering Express, 2020, 6, 065002.	1.2	0
15	Technical Note: Monte Carlo methods to comprehensively evaluate the robustness of 4D treatments in proton therapy. Medical Physics, 2019, 46, 4676-4684.	3.0	22
16	Towards fast and robust 4D optimization for moving tumors with scanned proton therapy. Medical Physics, 2019, 46, 5434-5443.	3.0	14
17	Mechanically-assisted and non-invasive ventilation for radiation therapy: A safe technique to regularize and modulate internal tumour motion. Radiotherapy and Oncology, 2019, 141, 283-291.	0.6	6
18	Mitigating inherent noise in Monte Carlo dose distributions using dilated Uâ€Net. Medical Physics, 2019, 46, 5790-5798.	3.0	13

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19	Nonlinear Dimensionality Reduction With Missing Data Using Parametric Multiple Imputations. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 1166-1179.	11.3	18
20	Effect of high hydrostatic pressure on extraction of B-phycoerythrin from Porphyridium cruentum: Use of confocal microscopy and image processing. Algal Research, 2019, 38, 101394.	4.6	15
21	Semantic segmentation of computed tomography for radiotherapy with deep learning: compensating insufficient annotation quality using contour augmentation. , 2019, , .		4
22	Patient-specific bolus for range shifter air gap reduction in intensity-modulated proton therapy of head-and-neck cancer studied with Monte Carlo based plan optimization. Radiotherapy and Oncology, 2018, 128, 161-166.	0.6	18
23	Performance of a hybrid Monte Carlo–Pencil Beam dose algorithm for proton therapy inverse planning. Medical Physics, 2018, 45, 846-862.	3.0	14
24	Molecular Imaging-Guided Radiotherapy for the Treatment of Head-and-Neck Squamous Cell Carcinoma: Does it Fulfill the Promises?. Seminars in Radiation Oncology, 2018, 28, 35-45.	2.2	35
25	Multi-organ Segmentation of Chest CT Images in Radiation Oncology: Comparison of Standard and Dilated UNet. Lecture Notes in Computer Science, 2018, , 188-199.	1.3	10
26	Evaluation of motion mitigation using abdominal compression in the clinical implementation of pencil beam scanning proton therapy of liver tumors. Medical Physics, 2017, 44, 703-712.	3.0	56
27	Classification and evaluation strategies of auto-segmentation approaches for PET: Report of AAPM task group No. 211. Medical Physics, 2017, 44, e1-e42.	3.0	162
28	Evolution of [18F]fluorodeoxyglucose and [18F]fluoroazomycin arabinoside PET uptake distributions in lung tumours during radiation therapy. Acta Oncológica, 2017, 56, 516-524.	1.8	17
29	Toward a standard for the evaluation of PET‐Auto‐Segmentation methods following the recommendations of AAPM task group No. 211: Requirements and implementation. Medical Physics, 2017, 44, 4098-4111.	3.0	35
30	What you see is what you can change: Human-centered machine learning by interactive visualization. Neurocomputing, 2017, 268, 164-175.	5.9	117
31	Trapping of carvacrol by konjac glucomannan-potato starch gels: Stability from macroscopic to microscopic scale, using image processing. Food Hydrocolloids, 2017, 66, 216-226.	10.7	20
32	Consistency in quality correction factors for ionization chamber dosimetry in scanned proton beam therapy. Medical Physics, 2017, 44, 4919-4927.	3.0	13
33	Correlation analysis of [18F]fluorodeoxyglucose and [18F]fluoroazomycin arabinoside uptake distributions in lung tumours during radiation therapy. Acta Oncológica, 2017, 56, 1181-1188.	1.8	17
34	An individualized radiation dose escalation trial in non-small cell lung cancer based on FDG-PET imaging. Strahlentherapie Und Onkologie, 2017, 193, 812-822.	2.0	14
35	Comparing dynamics of fluency and inter-limb coordination in climbing activities using multi-scale Jensen–Shannon embedding and clustering. Data Mining and Knowledge Discovery, 2017, 31, 1758-1792.	3.7	5
36	Radiation dose escalation based on FDG-PET driven dose painting by numbers in oropharyngeal squamous cell carcinoma: a dosimetric comparison between TomoTherapy-HA and RapidArc. Radiation Oncology, 2017, 12, 59.	2.7	12

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37	Visual Interaction with Dimensionality Reduction: A Structured Literature Analysis. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 241-250.	4.4	167
38	Fast multipurpose Monte Carlo simulation for proton therapy using multiâ€•and manyâ€•core CPU architectures. Medical Physics, 2016, 43, 1700-1712.	3.0	79
39	Image deconvolution by local order preservation of pixels values. , 2016, , .		0
40	Multi-step-ahead forecasting using kernel adaptive filtering. , 2016, , .		2
41	Methodology for adaptive and robust FDG-PET escalated dose painting by numbers in head and neck tumors. Acta OncolÃ³gica, 2016, 55, 217-225.	1.8	24
42	Post-reconstruction deconvolution of PET images by total generalized variation regularization. , 2015, , .		2
43	Impact of motion induced artifacts on automatic registration of lung tumors in Tomotherapy. Physica Medica, 2015, 31, 963-968.	0.7	3
44	Incremental classification of objects in scenes: Application to the delineation of images. Neurocomputing, 2015, 152, 45-57.	5.9	3
45	Multi-scale similarities in stochastic neighbour embedding: Reducing dimensionality while preserving both local and global structure. Neurocomputing, 2015, 169, 246-261.	5.9	61
46	Generation of prescriptions robust against geometric uncertainties in dose painting by numbers. Acta OncolÃ³gica, 2015, 54, 253-260.	1.8	15
47	Hypoxia-guided adaptive radiation dose escalation in head and neck carcinoma: A planning study. Acta OncolÃ³gica, 2015, 54, 1008-1016.	1.8	50
48	Reprogramming of tumor metabolism by targeting mitochondria improves tumor response to irradiation. Acta OncolÃ³gica, 2015, 54, 266-274.	1.8	30
49	Two key properties of dimensionality reduction methods. , 2014, , .		16
50	Generalized kernel framework for unsupervised spectral methods of dimensionality reduction. , 2014, , .		19
51	Validation of the mid-position strategy for lung tumors in helical TomoTherapy. Radiotherapy and Oncology, 2014, 110, 529-537.	0.6	30
52	Semiautomatic methods for segmentation of the proliferative tumour volume on sequential FLT PET/CT images in head and neck carcinomas and their relation to clinical outcome. European Journal of Nuclear Medicine and Molecular Imaging, 2014, 41, 915-924.	6.4	31
53	A prospective clinical study of 18 F-FAZA PET-CT hypoxia imaging in head and neck squamous cell carcinoma before and during radiation therapy. European Journal of Nuclear Medicine and Molecular Imaging, 2014, 41, 1544-1552.	6.4	97
54	Assessment of tumor motion reproducibility with audioâ€•visual coaching through successive 4D CT sessions. Journal of Applied Clinical Medical Physics, 2014, 15, 47-56.	1.9	33

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55	FDG PET/CT for rectal carcinoma radiotherapy treatment planning: comparison of functional volume delineation algorithms and clinical challenges. Journal of Applied Clinical Medical Physics, 2014, 15, 216-228.	1.9	14
56	Short Review of Dimensionality Reduction Methods Based on Stochastic Neighbour Embedding. Advances in Intelligent Systems and Computing, 2014, , 65-74.	0.6	16
57	Type 1 and 2 mixtures of Kullback–Leibler divergences as cost functions in dimensionality reduction based on similarity preservation. Neurocomputing, 2013, 112, 92-108.	5.9	66
58	Combining multiple FDG–PET radiotherapy target segmentation methods to reduce the effect of variable performance of individual segmentation methods. Medical Physics, 2013, 40, 042501.	3.0	21
59	Influence of filter choice on 18F-FDG PET segmentation accuracy determined using generalized estimating equations. Physics in Medicine and Biology, 2013, 58, 3517-3534.	3.0	1
60	Improving projection-based data analysis by feature space transformations. Proceedings of SPIE, 2013, , .	0.8	9
61	Nonlinear Dimensionality Reduction for Visualization. Lecture Notes in Computer Science, 2013, , 617-622.	1.3	8
62	Segmentation with Incremental Classifiers. Lecture Notes in Computer Science, 2013, , 81-90.	1.3	0
63	Comparative Study With New Accuracy Metrics for Target Volume Contouring in PET Image Guided Radiation Therapy. IEEE Transactions on Medical Imaging, 2012, 31, 2006-2024.	8.9	75
64	Radiotherapy for head and neck tumours in 2012 and beyond: conformal, tailored, and adaptive?. Lancet Oncology, The, 2012, 13, e292-e300.	10.7	96
65	Helical tomotherapy for SIB and hypo-fractionated treatments in lung carcinomas: A 4D Monte Carlo treatment planning study. Radiotherapy and Oncology, 2012, 104, 173-180.	0.6	23
66	Gradient-based delineation of the primary GTV on FDG-PET in non-small cell lung cancer: A comparison with threshold-based approaches, CT and surgical specimens. Radiotherapy and Oncology, 2011, 98, 117-125.	0.6	147
67	Adaptive functional image-guided IMRT in pharyngo-laryngeal squamous cell carcinoma: Is the gain in dose distribution worth the effort?. Radiotherapy and Oncology, 2011, 101, 343-350.	0.6	79
68	Shift-invariant similarities circumvent distance concentration in stochastic neighbor embedding and variants. Procedia Computer Science, 2011, 4, 538-547.	2.0	17
69	Mode estimation in high-dimensional spaces with flat-top kernels: Application to image denoising. Neurocomputing, 2011, 74, 1402-1410.	5.9	7
70	A principled approach to image denoising with similarity kernels involving patches. Neurocomputing, 2010, 73, 1199-1209.	5.9	7
71	Adaptive Radiotherapy of Head and Neck Cancer. Seminars in Radiation Oncology, 2010, 20, 84-93.	2.2	164
72	Scale-independent quality criteria for dimensionality reduction. Pattern Recognition Letters, 2010, 31, 2248-2257.	4.2	68

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73	Dimensionality reduction by rank preservation. , 2010, , .		4
74	Unsupervised dimensionality reduction: Overview and recent advances. , 2010, , .		24
75	Is 18F-FDG a surrogate tracer to measure tumor hypoxia? Comparison with the hypoxic tracer 14C-EF3 in animal tumor models. Radiotherapy and Oncology, 2010, 97, 183-188.	0.6	38
76	Assessment by a deformable registration method of the volumetric and positional changes of target volumes and organs at risk in pharyngo-laryngeal tumors treated with concomitant chemo-radiation. Radiotherapy and Oncology, 2010, 95, 209-217.	0.6	102
77	Evaluation of the radiobiological impact of anatomic modifications during radiation therapy for head and neck cancer: Can we simply summate the dose?. Radiotherapy and Oncology, 2010, 96, 131-138.	0.6	15
78	Segmentation of positron emission tomography images: Some recommendations for target delineation in radiation oncology. Radiotherapy and Oncology, 2010, 96, 302-307.	0.6	145
79	PET/CT (and CT) instrumentation, image reconstruction and data transfer for radiotherapy planning. Radiotherapy and Oncology, 2010, 96, 288-297.	0.6	45
80	On the Role and Impact of the Metaparameters in t-distributed Stochastic Neighbor Embedding. , 2010, , 337-346.		4
81	Variance stabilizing transformations in patch-based bilateral filters for poisson noise image denoising. , 2009, 2009, 3673-6.		10
82	Quality assessment of dimensionality reduction: Rank-based criteria. Neurocomputing, 2009, 72, 1431-1443.	5.9	212
83	Tumor Delineation Based on Timeâ€"Activity Curve Differences Assessed With Dynamic Fluorodeoxyglucose Positron Emission Tomographyâ€"Computed Tomography in Rectal Cancer Patients. International Journal of Radiation Oncology Biology Physics, 2009, 73, 456-465.	0.8	31
84	Biological Image-Guided Radiotherapy in Rectal Cancer: Challenges and Pitfalls. International Journal of Radiation Oncology Biology Physics, 2009, 75, 782-790.	0.8	47
85	The limitation of PET imaging for biological adaptive-IMRT assessed in animal models. Radiotherapy and Oncology, 2009, 91, 101-106.	0.6	51
86	Evaluation of MVCT protocols for brain and head and neck tumor patients treated with helical tomotherapy. Radiotherapy and Oncology, 2009, 93, 50-56.	0.6	23
87	Simbed: Similarity-Based Embedding. Lecture Notes in Computer Science, 2009, , 95-104.	1.3	3
88	Blind source separation based on endpoint estimation with application to the MLSP 2006 data competition. Neurocomputing, 2008, 72, 47-56.	5.9	3
89	Edge-Preserving Filtering of Images with Low Photon Counts. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1014-1027.	13.9	29
90	Immobilization device for in vivo and in vitro multimodality image registration of rodent tumors. Radiotherapy and Oncology, 2008, 87, 147-151.	0.6	16

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91	Comparison of 12 deformable registration strategies in adaptive radiation therapy for the treatment of head and neck tumors. Radiotherapy and Oncology, 2008, 89, 1-12.	0.6	174
92	Biological image-guided radiotherapy in rectal cancer: Is there a role for FMISO or FLT, next to FDG?. Acta Oncológica, 2008, 47, 1237-1248.	1.8	76
93	A Minimum-Range Approach to Blind Extraction of Bounded Sources. IEEE Transactions on Neural Networks, 2007, 18, 809-822.	4.2	26
94	Adaptive biological image-guided IMRT with anatomic and functional imaging in pharyngo-laryngeal tumors: Impact on target volume delineation and dose distribution using helical tomotherapy. Radiotherapy and Oncology, 2007, 85, 105-115.	0.6	150
95	Forecasting the CATS benchmark with the Double Vector Quantization method. Neurocomputing, 2007, 70, 2400-2409.	5.9	10
96	A gradient-based method for segmenting FDG-PET images: methodology and validation. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 1427-1438.	6.4	373
97	A Least Absolute Bound Approach to ICA Â¿ Application to the MLSP 2006 Competition. IEEE International Workshop on Machine Learning for Signal Processing, 2006, , .	0.0	4
98	Unfolding preprocessing for meaningful time series clustering. Neural Networks, 2006, 19, 877-888.	5.9	21
99	Filtering-Free Blind Separation of Correlated Images. Lecture Notes in Computer Science, 2005, , 1091-1099.	1.3	5
100	Nonlinear dimensionality reduction of data manifolds with essential loops. Neurocomputing, 2005, 67, 29-53.	5.9	71
101	Non-linear ICA by Using Isometric Dimensionality Reduction. Lecture Notes in Computer Science, 2004, , 710-717.	1.3	2
102	Nonlinear projection with curvilinear distances: Isomap versus curvilinear distance analysis. Neurocomputing, 2004, 57, 49-76.	5.9	142
103	Self-organizing maps with recursive neighborhood adaptation. Neural Networks, 2002, 15, 993-1003.	5.9	84
104	Nonlinear Projection with the Isotop Method. Lecture Notes in Computer Science, 2002, , 933-938.	1.3	11