John Aldo Lee

List of Publications by Year
in descending order

104 papers	4,335 citations	126858 33 h-index	114418 63 g-index
107 all docs	107 docs citations	107 times ranked	4121 citing authors

#	Article	IF	Citations
1	A gradient-based method for segmenting FDG-PET images: methodology and validation. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 1427-1438.	3.3	373
2	Quality assessment of dimensionality reduction: Rank-based criteria. Neurocomputing, 2009, 72, 1431-1443.	3.5	212
3	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.	0.3	174
4	Visual Interaction with Dimensionality Reduction: A Structured Literature Analysis. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 241-250.	2.9	167
5	Adaptive Radiotherapy of Head and Neck Cancer. Seminars in Radiation Oncology, 2010, 20, 84-93.	1.0	164
6	Classification and evaluation strategies of auto-segmentation approaches for PET: Report of AAPM task group No. 211. Medical Physics, 2017, 44, e1-e42.	1.6	162
7	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.	0.3	150
8	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.	0.3	147
9	Segmentation of positron emission tomography images: Some recommendations for target delineation in radiation oncology. Radiotherapy and Oncology, 2010, 96, 302-307.	0.3	145
10	Nonlinear projection with curvilinear distances: Isomap versus curvilinear distance analysis. Neurocomputing, 2004, 57, 49-76.	3.5	142
11	Artificial intelligence and machine learning for medical imaging: A technology review. Physica Medica, 2021, 83, 242-256.	0.4	135
12	What you see is what you can change: Human-centered machine learning by interactive visualization. Neurocomputing, 2017, 268, 164-175.	3.5	117
13	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.	0.3	102
14	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.	3.3	97
15	Radiotherapy for head and neck tumours in 2012 and beyond: conformal, tailored, and adaptive?. Lancet Oncology, The, 2012, 13, e292-e300.	5.1	96
16	Self-organizing maps with recursive neighborhood adaptation. Neural Networks, 2002, 15, 993-1003.	3.3	84
17	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.	0.3	79
18	Fast multipurpose Monte Carlo simulation for proton therapy using multiâ€•and manyâ€•core CPU architectures. Medical Physics, 2016, 43, 1700-1712.	1.6	79

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19	Biological image-guided radiotherapy in rectal cancer: Is there a role for FMISO or FLT, next to FDG?. Acta Oncológica, 2008, 47, 1237-1248.	0.8	76
20	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.	5.4	75
21	Nonlinear dimensionality reduction of data manifolds with essential loops. Neurocomputing, 2005, 67, 29-53.	3.5	71
22	Scale-independent quality criteria for dimensionality reduction. Pattern Recognition Letters, 2010, 31, 2248-2257.	2.6	68
23	Type 1 and 2 mixtures of Kullback–Leibler divergences as cost functions in dimensionality reduction based on similarity preservation. Neurocomputing, 2013, 112, 92-108.	3.5	66
24	Multi-scale similarities in stochastic neighbour embedding: Reducing dimensionality while preserving both local and global structure. Neurocomputing, 2015, 169, 246-261.	3.5	61
25	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.	1.6	56
26	The limitation of PET imaging for biological adaptive-IMRT assessed in animal models. Radiotherapy and Oncology, 2009, 91, 101-106.	0.3	51
27	Hypoxia-guided adaptive radiation dose escalation in head and neck carcinoma: A planning study. Acta Oncológica, 2015, 54, 1008-1016.	0.8	50
28	Biological Image-Guided Radiotherapy in Rectal Cancer: Challenges and Pitfalls. International Journal of Radiation Oncology Biology Physics, 2009, 75, 782-790.	0.4	47
29	PET/CT (and CT) instrumentation, image reconstruction and data transfer for radiotherapy planning. Radiotherapy and Oncology, 2010, 96, 288-297.	0.3	45
30	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.	0.3	38
31	Toward a standard for the evaluation of ‹scp›PET‹/scp›‑Auto‑Segmentation methods following the recommendations of AAPM task group No. 211: Requirements and implementation. Medical Physics, 2017, 44, 4098-4111.	1.6	35
32	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.	1.0	35
33	Assessment of tumor motion reproducibility with audio‑visual coaching through successive 4D CT sessions. Journal of Applied Clinical Medical Physics, 2014, 15, 47-56.	0.8	33
34	Tumor Delineation Based on Time–Activity Curve Differences Assessed With Dynamic Fluorodeoxyglucose Positron Emission Tomography–Computed Tomography in Rectal Cancer Patients. International Journal of Radiation Oncology Biology Physics, 2009, 73, 456-465.	0.4	31
35	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.	3.3	31
36	Validation of the mid-position strategy for lung tumors in helical TomoTherapy. Radiotherapy and Oncology, 2014, 110, 529-537.	0.3	30

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37	Reprogramming of tumor metabolism by targeting mitochondria improves tumor response to irradiation. Acta OncolÃ³gica, 2015, 54, 266-274.	0.8	30
38	Edge-Preserving Filtering of Images with Low Photon Counts. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1014-1027.	9.7	29
39	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.	0.4	29
40	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.	3.9	27
41	A Minimum-Range Approach to Blind Extraction of Bounded Sources. IEEE Transactions on Neural Networks, 2007, 18, 809-822.	4.8	26
42	Unsupervised dimensionality reduction: Overview and recent advances. , 2010, , .		24
43	Methodology for adaptive and robust FDG-PET escalated dose painting by numbers in head and neck tumors. Acta OncolÃ³gica, 2016, 55, 217-225.	0.8	24
44	Evaluation of MVCT protocols for brain and head and neck tumor patients treated with helical tomotherapy. Radiotherapy and Oncology, 2009, 93, 50-56.	0.3	23
45	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.	0.3	23
46	Technical Note: Monte Carlo methods to comprehensively evaluate the robustness of 4D treatments in proton therapy. Medical Physics, 2019, 46, 4676-4684.	1.6	22
47	Unfolding preprocessing for meaningful time series clustering. Neural Networks, 2006, 19, 877-888.	3.3	21
48	Combining multiple FDGâ€PET radiotherapy target segmentation methods to reduce the effect of variable performance of individual segmentation methods. Medical Physics, 2013, 40, 042501.	1.6	21
49	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.	1.6	21
50	Trapping of carvacrol by konjac glucomannan-potato starch gels: Stability from macroscopic to microscopic scale, using image processing. Food Hydrocolloids, 2017, 66, 216-226.	5.6	20
51	Generalized kernel framework for unsupervised spectral methods of dimensionality reduction. , 2014, , .		19
52	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.	0.3	18
53	Nonlinear Dimensionality Reduction With Missing Data Using Parametric Multiple Imputations. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 1166-1179.	7.2	18
54	Shift-invariant similarities circumvent distance concentration in stochastic neighbor embedding and variants. Procedia Computer Science, 2011, 4, 538-547.	1.2	17

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55	Evolution of [18F]fluorodeoxyglucose and [18F]fluoroazomycin arabinoside PET uptake distributions in lung tumours during radiation therapy. Acta Oncológica, 2017, 56, 516-524.	0.8	17
56	Correlation analysis of [18F]fluorodeoxyglucose and [18F]fluoroazomycin arabinoside uptake distributions in lung tumours during radiation therapy. Acta Oncológica, 2017, 56, 1181-1188.	0.8	17
57	Immobilization device for in vivo and in vitro multimodality image registration of rodent tumors. Radiotherapy and Oncology, 2008, 87, 147-151.	0.3	16
58	Two key properties of dimensionality reduction methods. , 2014, , .		16
59	Short Review of Dimensionality Reduction Methods Based on Stochastic Neighbour Embedding. Advances in Intelligent Systems and Computing, 2014, , 65-74.	0.5	16
60	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.	0.3	15
61	Generation of prescriptions robust against geometric uncertainties in dose painting by numbers. Acta Oncológica, 2015, 54, 253-260.	0.8	15
62	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.	2.4	15
63	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.	0.8	14
64	An individualized radiation dose escalation trial in non-small cell lung cancer based on FDG-PET imaging. Strahlentherapie Und Onkologie, 2017, 193, 812-822.	1.0	14
65	Performance of a hybrid Monte Carlo–Pencil Beam dose algorithm for proton therapy inverse planning. Medical Physics, 2018, 45, 846-862.	1.6	14
66	Towards fast and robust 4D optimization for moving tumors with scanned proton therapy. Medical Physics, 2019, 46, 5434-5443.	1.6	14
67	Consistency in quality correction factors for ionization chamber dosimetry in scanned proton beam therapy. Medical Physics, 2017, 44, 4919-4927.	1.6	13
68	Mitigating inherent noise in Monte Carlo dose distributions using dilated U-Net. Medical Physics, 2019, 46, 5790-5798.	1.6	13
69	Cross-Domain Data Augmentation for Deep-Learning-Based Male Pelvic Organ Segmentation in Cone Beam CT. Applied Sciences (Switzerland), 2020, 10, 1154.	1.3	13
70	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.	1.2	12
71	Nonlinear Projection with the Isotop Method. Lecture Notes in Computer Science, 2002, , 933-938.	1.0	11
72	Forecasting the CATS benchmark with the Double Vector Quantization method. Neurocomputing, 2007, 70, 2400-2409.	3.5	10

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73	Variance stabilizing transformations in patch-based bilateral filters for poisson noise image denoising. , 2009, 2009, 3673-6.		10
74	Multi-organ Segmentation of Chest CT Images in Radiation Oncology: Comparison of Standard and Dilated UNet. Lecture Notes in Computer Science, 2018, , 188-199.	1.0	10
75	Improving projection-based data analysis by feature space transformations. Proceedings of SPIE, 2013, , .	0.8	9
76	Accelerated robust optimization algorithm for proton therapy treatment planning. Medical Physics, 2020, 47, 2746-2754.	1.6	9
77	A noise correction of the γ €index method for Monte Carlo dose distribution comparison. Medical Physics, 2020, 47, 681-692.	1.6	8
78	Nonlinear Dimensionality Reduction for Visualization. Lecture Notes in Computer Science, 2013, , 617-622.	1.0	8
79	A principled approach to image denoising with similarity kernels involving patches. Neurocomputing, 2010, 73, 1199-1209.	3.5	7
80	Mode estimation in high-dimensional spaces with flat-top kernels: Application to image denoising. Neurocomputing, 2011, 74, 1402-1410.	3.5	7
81	Denoising proton therapy Monte Carlo dose distributions in multiple tumor sites: A comparative neural networks architecture study. Physica Medica, 2021, 89, 93-103.	0.4	7
82	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.	0.3	6
83	Fast Multiscale Neighbor Embedding. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1546-1560.	7.2	6
84	Filtering-Free Blind Separation of Correlated Images. Lecture Notes in Computer Science, 2005, , 1091-1099.	1.0	5
85	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.	2.4	5
86	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
87	Dimensionality reduction by rank preservation. , 2010, , .		4
88	On the Role and Impact of the Metaparameters in t-distributed Stochastic Neighbor Embedding. , 2010, , 337-346.		4
89	Semantic segmentation of computed tomography for radiotherapy with deep learning: compensating insufficient annotation quality using contour augmentation. , 2019, , .		4
90	Blind source separation based on endpoint estimation with application to the MLSP 2006 data competition. Neurocomputing, 2008, 72, 47-56.	3.5	3

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91	Impact of motion induced artifacts on automatic registration of lung tumors in Tomotherapy. Physica Medica, 2015, 31, 963-968.	0.4	3
92	Incremental classification of objects in scenes: Application to the delineation of images. Neurocomputing, 2015, 152, 45-57.	3.5	3
93	Simbed: Similarity-Based Embedding. Lecture Notes in Computer Science, 2009, , 95-104.	1.0	3
94	Incorporation of tumor motion directionality in margin recipe: The directional MidP strategy. Physica Medica, 2021, 91, 43-53.	0.4	3
95	Non-linear ICA by Using Isometric Dimensionality Reduction. Lecture Notes in Computer Science, 2004, , 710-717.	1.0	2
96	Post-reconstruction deconvolution of PET images by total generalized variation regularization. , 2015, , .		2
97	Multi-step-ahead forecasting using kernel adaptive filtering. , 2016, , .		2
98	Influence of filter choice on 18F-FDG PET segmentation accuracy determined using generalized estimating equations. Physics in Medicine and Biology, 2013, 58, 3517-3534.	1.6	1
99	Tuning Database-Friendly Random Projection Matrices for Improved Distance Preservation on Specific Data. Applied Intelligence, 2022, 52, 4927-4939.	3.3	1
100	Introducing a probabilistic definition of the target in a robust treatment planning framework. Physics in Medicine and Biology, 2021, 66, 155008.	1.6	1
101	SQuadMDS: A lean Stochastic Quartet MDS improving global structure preservation in neighbor embedding like t-SNE and UMAP. Neurocomputing, 2022, 503, 17-27.	3.5	1
102	Image deconvolution by local order preservation of pixels values. , 2016, , .		0
103	Segmentation with Incremental Classifiers. Lecture Notes in Computer Science, 2013, , 81-90.	1.0	0
104	Improvement of kilovoltage intrafraction monitoring accuracy through gantry angles selection. Biomedical Physics and Engineering Express, 2020, 6, 065002.	0.6	0