Arnau Oliver

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2449440/publications.pdf

Version: 2024-02-01

116 papers	4,376 citations	168829 31 h-index	139680 61 g-index
121 all docs	121 docs citations	121 times ranked	5309 citing authors

#	Article	IF	Citations
1	Assessment of automatic decision-support systems for detecting active T2 lesions in multiple sclerosis patients. Multiple Sclerosis Journal, 2022, 28, 1209-1218.	1.4	4
2	Deep Learning for Medical Imaging. , 2022, , 11-54.		0
3	Usefulness of Collaborative Work in the Evaluation of Prostate Cancer from MRI. Clinics and Practice, 2022, 12, 350-362.	0.6	2
4	Generating Longitudinal Atrophy Evaluation Datasets on Brain Magnetic Resonance Images Using Convolutional Neural Networks and Segmentation Priors. Neuroinformatics, 2021, 19, 477-492.	1.5	5
5	Evaluating the Effect of Intensity Standardisation on Longitudinal Whole Brain Atrophy Quantification in Brain Magnetic Resonance Imaging. Applied Sciences (Switzerland), 2021, 11, 1773.	1.3	2
6	Transductive Transfer Learning for Domain Adaptation in Brain Magnetic Resonance Image Segmentation. Frontiers in Neuroscience, 2021, 15, 608808.	1.4	5
7	Assessing the Accuracy and Reproducibility of <scp>PARIETAL</scp>: A Deep Learning Brain Extraction Algorithm. Journal of Magnetic Resonance Imaging, 2021, , .	1.9	7
8	Hemorrhagic stroke lesion segmentation using a 3D U-Net with squeeze-and-excitation blocks. Computerized Medical Imaging and Graphics, 2021, 90, 101908.	3.5	21
9	A fully convolutional neural network for new T2-w lesion detection in multiple sclerosis. NeuroImage: Clinical, 2020, 25, 102149.	1.4	40
10	A fully automated pipeline for brain structure segmentation in multiple sclerosis. NeuroImage: Clinical, 2020, 27, 102306.	1.4	5
11	Improving the detection of autism spectrum disorder by combining structural and functional MRI information. NeuroImage: Clinical, 2020, 25, 102181.	1.4	59
12	Acute and sub-acute stroke lesion segmentation from multimodal MRI. Computer Methods and Programs in Biomedicine, 2020, 194, 105521.	2.6	35
13	Multiple Sclerosis Lesion Segmentation Using Longitudinal Normalization and Convolutional Recurrent Neural Networks. Lecture Notes in Computer Science, 2020, , 148-158.	1.0	0
14	Quantitative Analysis of Patch-Based Fully Convolutional Neural Networks for Tissue Segmentation on Brain Magnetic Resonance Imaging. IEEE Access, 2019, 7, 89986-90002.	2.6	28
15	Acute ischemic stroke lesion core segmentation in CT perfusion images using fully convolutional neural networks. Computers in Biology and Medicine, 2019, 115, 103487.	3.9	69
16	Supervised Domain Adaptation for Automatic Sub-cortical Brain Structure Segmentation with Minimal User Interaction. Scientific Reports, 2019, 9, 6742.	1.6	36
17	Breast MRI and X-ray mammography registration using gradient values. Medical Image Analysis, 2019, 54, 76-87.	7.0	20
18	Multiple Sclerosis Lesion Synthesis in MRI Using an Encoder-Decoder U-NET. IEEE Access, 2019, 7, 25171-25184.	2.6	46

#	Article	IF	Citations
19	Brain structure segmentation in the presence of multiple sclerosis lesions. NeuroImage: Clinical, 2019, 22, 101709.	1.4	15
20	Deep convolutional neural networks for brain image analysis on magnetic resonance imaging: a review. Artificial Intelligence in Medicine, 2019, 95, 64-81.	3.8	257
21	One-shot domain adaptation in multiple sclerosis lesion segmentation using convolutional neural networks. NeuroImage: Clinical, 2019, 21, 101638.	1.4	91
22	A supervised framework with intensity subtraction and deformation field features for the detection of new T2-w lesions in multiple sclerosis. NeuroImage: Clinical, 2018, 17, 607-615.	1.4	39
23	Multimodal Breast Parenchymal Patterns Correlation Using a Patient-Specific Biomechanical Model. IEEE Transactions on Medical Imaging, 2018, 37, 712-723.	5.4	4
24	A stepâ€byâ€step review on patientâ€specific biomechanical finite element models for breast MRI to xâ€ray mammography registration. Medical Physics, 2018, 45, e6-e31.	1.6	22
25	Multi-atlas Parcellation in the Presence of Lesions: Application to Multiple Sclerosis. Lecture Notes in Computer Science, 2018, , 104-113.	1.0	2
26	Automated sub-cortical brain structure segmentation combining spatial and deep convolutional features. Medical Image Analysis, 2018, 48, 177-186.	7.0	90
27	Changes in breast density over time using automatic density measures: preliminary analysis. , 2018, , .		0
28	Scattered radiation in DBT geometries with flexible breast compression paddles: a Monte Carlo simulation study. Proceedings of SPIE, 2017, , .	0.8	2
29	Improving automated multiple sclerosis lesion segmentation with a cascaded 3D convolutional neural network approach. NeuroImage, 2017, 155, 159-168.	2.1	287
30	Evaluating the effect of multiple sclerosis lesions on automatic brain structure segmentation. NeuroImage: Clinical, 2017, 15, 228-238.	1.4	19
31	Local breast density assessment using reacquired mammographic images. European Journal of Radiology, 2017, 93, 121-127.	1.2	7
32	Automated tissue segmentation of MR brain images in the presence of white matter lesions. Medical Image Analysis, 2017, 35, 446-457.	7.0	55
33	On the Use of XML in Medical Imaging Web-Based Applications. Irbm, 2017, 38, 3-12.	3.7	3
34	Automated Detection of Lupus White Matter Lesions in MRI. Frontiers in Neuroinformatics, 2016, 10, 33.	1.3	18
35	Automated quality assessment in three-dimensional breast ultrasound images. Journal of Medical Imaging, 2016, 3, 027002.	0.8	12
36	An SPM12 extension for multiple sclerosis lesion segmentation. , 2016, , .		2

#	Article	IF	Citations
37	A review on brain structures segmentation in magnetic resonance imaging. Artificial Intelligence in Medicine, 2016, 73, 45-69.	3.8	101
38	Improved Automatic Detection of New T2 Lesions in Multiple Sclerosis Using Deformation Fields. American Journal of Neuroradiology, 2016, 37, 1816-1823.	1.2	30
39	Feasibility of Depth Sensors to Study Breast Deformation During Mammography Procedures. Lecture Notes in Computer Science, 2016, , 446-453.	1.0	0
40	Evaluating the Effects of White Matter Multiple Sclerosis Lesions on the Volume Estimation of 6 Brain Tissue Segmentation Methods. American Journal of Neuroradiology, 2015, 36, 1109-1115.	1.2	12
41	A Review on Automatic Mammographic Density and Parenchymal Segmentation. International Journal of Breast Cancer, 2015, 2015, 1-31.	0.6	40
42	Quantifying brain tissue volume in multiple sclerosis with automated lesion segmentation and filling. NeuroImage: Clinical, 2015, 9, 640-647.	1.4	31
43	Breast Density Analysis Using an Automatic Density Segmentation Algorithm. Journal of Digital Imaging, 2015, 28, 604-612.	1.6	40
44	ProstateAnalyzer: web-based medical application for the management of prostate cancer using multiparametric MR imaging. Informatics for Health and Social Care, 2015, 41, 1-21.	1.4	6
45	A toolbox for multiple sclerosis lesion segmentation. Neuroradiology, 2015, 57, 1031-1043.	1.1	76
46	Topological Modeling and Classification of Mammographic Microcalcification Clusters. IEEE Transactions on Biomedical Engineering, 2015, 62, 1203-1214.	2.5	65
47	Comparison of 10 brain tissue segmentation methods using revisited IBSR annotations. Journal of Magnetic Resonance Imaging, 2015, 41, 93-101.	1.9	76
48	BOOST: A supervised approach for multiple sclerosis lesion segmentation. Journal of Neuroscience Methods, 2014, 237, 108-117.	1.3	28
49	One-shot segmentation of breast, pectoral muscle, and background in digitised mammograms. , 2014, , .		13
50	Intensity Based Methods for Brain MRI Longitudinal Registration. A Study on Multiple Sclerosis Patients. Neuroinformatics, 2014, 12, 365-379.	1.5	13
51	A subtraction pipeline for automatic detection of new appearing multiple sclerosis lesions in longitudinal studies. Neuroradiology, 2014, 56, 363-374.	1.1	47
52	MARGA: Multispectral Adaptive Region Growing Algorithm for brain extraction on axial MRI. Computer Methods and Programs in Biomedicine, 2014, 113, 655-673.	2.6	32
53	A white matter lesion-filling approach to improve brain tissue volume measurements. NeuroImage: Clinical, 2014, 6, 86-92.	1.4	55
54	Breast peripheral area correction in digital mammograms. Computers in Biology and Medicine, 2014, 50, 32-40.	3.9	15

#	Article	IF	Citations
55	Automatic multiple sclerosis lesion detection in brain MRI by FLAIR thresholding. Computer Methods and Programs in Biomedicine, 2014, 115, 147-161.	2.6	39
56	Detecting Abnormal Mammographic Cases in Temporal Studies Using Image Registration Features. Lecture Notes in Computer Science, 2014, , 612-619.	1.0	4
57	SIFT Texture Description for Understanding Breast Ultrasound Images. Lecture Notes in Computer Science, 2014, , 681-688.	1.0	6
58	Automated Mammographic Risk Classification Based on Breast Density Estimation. Lecture Notes in Computer Science, 2013, , 237-244.	1.0	12
59	A supervised learning framework of statistical shape and probability priors for automatic prostate segmentation in ultrasound images. Medical Image Analysis, 2013, 17, 587-600.	7.0	46
60	A Supervised Approach for Multiple Sclerosis Lesion Segmentation Using Context Features and an Outlier Map. Lecture Notes in Computer Science, 2013, , 782-789.	1.0	1
61	Joint probability of shape and image similarities to retrieve 2D TRUS-MR slice correspondence for prostate biopsy. , 2012, 2012, 5416-9.		2
62	A coupled schema of probabilistic atlas and statistical shape and appearance model for 3D prostate segmentation in MR images. , 2012, , .		2
63	Spectral clustering of shape and probability prior models for automatic prostate segmentation. , 2012, 2012, 2335-8.		4
64	Weighted likelihood function of multiple statistical parameters to retrieve 2D TRUS-MR slice correspondence for prostate biopsy. , 2012, , .		1
65	A hybrid framework of multiple active appearance models and global registration for 3D prostate segmentation in MRI. , 2012, , .		7
66	A shape-based statistical method to retrieve 2D TRUS-MR slice correspondence for prostate biopsy. , 2012, , .		2
67	A spline-based non-linear diffeomorphism for multimodal prostate registration. Medical Image Analysis, 2012, 16, 1259-1279.	7.0	37
68	A survey of prostate segmentation methodologies in ultrasound, magnetic resonance and computed tomography images. Computer Methods and Programs in Biomedicine, 2012, 108, 262-287.	2.6	168
69	MammoApplet: An interactive Java applet tool for manual annotation in medical imaging. , 2012, , .		7
70	Automated detection of multiple sclerosis lesions in serial brain MRI. Neuroradiology, 2012, 54, 787-807.	1.1	76
71	Prostate multimodality image registration based on B-splines and quadrature local energy. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 445-454.	1.7	13
72	Segmentation of multiple sclerosis lesions in brain MRI: A review of automated approaches. Information Sciences, 2012, 186, 164-185.	4.0	182

#	Article	IF	Citations
73	Automatic microcalcification and cluster detection for digital and digitised mammograms. Knowledge-Based Systems, 2012, 28, 68-75.	4.0	91
74	Statistical shape and texture model of quadrature phase information for prostate segmentation. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 43-55.	1.7	14
75	Automatic Seed Placement for Breast Lesion Segmentation on US Images. Lecture Notes in Computer Science, 2012, , 308-315.	1.0	6
76	Adapting Breast Density Classification from Digitized to Full-Field Digital Mammograms. Lecture Notes in Computer Science, 2012, , 561-568.	1.0	14
77	A Supervised Learning Framework for Automatic Prostate Segmentation in Trans Rectal Ultrasound Images. Lecture Notes in Computer Science, 2012, , 190-200.	1.0	6
78	A probabilistic framework for automatic prostate segmentation with a statistical model of shape and appearance. , 2011, , .		7
79	Statistical Shape and Probability Prior Model for Automatic Prostate Segmentation. , 2011, , .		2
80	A Non-Linear Diffeomorphic Framework for Prostate Multimodal Registration. , 2011, , .		3
81	Revisiting Intensity-Based Image Registration Applied to Mammography. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 716-725.	3.6	36
82	A review of atlas-based segmentation for magnetic resonance brain images. Computer Methods and Programs in Biomedicine, 2011, 104, e158-e177.	2.6	336
83	Reconstruction of non-rigid 3D shapes from stereo-motion. Pattern Recognition Letters, 2011, 32, 1020-1028.	2.6	9
84	Segmenting extended structures in radio astronomical images by filtering bright compact sources and using wavelets decomposition. , 2011, , .		6
85	Prostate segmentation with local binary patterns guided active appearance models. , 2011, , .		9
86	A comparison of thin-plate splines with automatic correspondences and B-splines with uniform grids for multimodal prostate registration. Proceedings of SPIE, 2011, , .	0.8	4
87	A Statistical Approach for Breast Density Segmentation. Journal of Digital Imaging, 2010, 23, 527-537.	1.6	48
88	A review of automatic mass detection and segmentation in mammographic images. Medical Image Analysis, 2010, 14, 87-110.	7.0	343
89	Improving a CAD system using bilateral information. , 2010, 2010, 5054-7.		2
90	A supervised micro-calcification detection approach in digitised mammograms. , 2010, , .		4

#	Article	IF	Citations
91	Multimodal Prostate Registration Using Thin-Plate Splines from Automatic Correspondences. , 2010, , .		5
92	Automatic Diagnosis of Masses by Using Level set Segmentation and Shape Description. , 2010, , .		6
93	A Thin-Plate Spline Based Multimodal Prostate Registration with Optimal Correspondences. , 2010, , .		10
94	Texture Guided Active Appearance Model Propagation for Prostate Segmentation. Lecture Notes in Computer Science, 2010, , 111-120.	1.0	11
95	Prostate Segmentation with Texture Enhanced Active Appearance Model. , 2010, , .		12
96	Comparison of registration methods using mamographic images. , 2010, , .		8
97	Influence of Using Manual or Automatic Breast Density Information in a Mass Detection CAD System. Academic Radiology, 2010, 17, 877-883.	1.3	13
98	A Boosting Based Approach for Automatic Micro-calcification Detection. Lecture Notes in Computer Science, 2010, , 251-258.	1.0	4
99	A textural approach for mass false positive reduction in mammography. Computerized Medical Imaging and Graphics, 2009, 33, 415-422.	3.5	80
100	A Novel Breast Tissue Density Classification Methodology. IEEE Transactions on Information Technology in Biomedicine, 2008, 12, 55-65.	3.6	206
101	Breast Density Segmentation: A Comparison of Clustering and Region Based Techniques. Lecture Notes in Computer Science, 2008, , 9-16.	1.0	17
102	Eigendetection of masses considering false positive reduction and breast density information. Medical Physics, 2008, 35, 1840-1853.	1.6	22
103	False Positive Reduction in Breast Mass Detection Using Two-Dimensional PCA. Lecture Notes in Computer Science, 2007, , 154-161.	1.0	11
104	Breast Skin-Line Segmentation Using Contour Growing. Lecture Notes in Computer Science, 2007, , 564-571.	1.0	17
105	False Positive Reduction in Mammographic Mass Detection Using Local Binary Patterns. , 2007, 10, 286-293.		66
106	Improving Clustering Algorithms for Image Segmentation using Contour and Region Information. , 2006, , .		30
107	A new approach to the classification of mammographic masses and normal breast tissue. , 2006, , .		16
108	Object and Scene Classification: what does a Supervised Approach Provide us?. , 2006, , .		10

#	Article	IF	Citations
109	A Comparison of Breast Tissue Classification Techniques. Lecture Notes in Computer Science, 2006, 9, 872-879.	1.0	19
110	Comparison Between Wolfe, Boyd, BI-RADS and TabÃ¡r Based Mammographic Risk Assessment. Lecture Notes in Computer Science, 2006, , 407-415.	1.0	26
111	Automatic Classification of Breast Tissue. Lecture Notes in Computer Science, 2005, , 431-438.	1.0	18
112	Automatic classification of breast density. , 2005, , .		41
113	Breast profile segmentation based on the region growing approach. International Congress Series, 2005, 1281, 1397.	0.2	1
114	Breast Segmentation with Pectoral Muscle Suppression on Digital Mammograms. Lecture Notes in Computer Science, 2005, , 471-478.	1.0	103
115	Active Region Segmentation of Mammographic Masses Based on Texture, Contour and Shape Features. Lecture Notes in Computer Science, 2003, , 478-485.	1.0	11
116	Modeling and Classifying Breast Tissue Density in Mammograms. , 0, , .		44