Xavier LladÃ³ Bardera

List of Publications by Year
in descending order

135 papers	5,100 citations	134610 34 h-index	116156 66 g-index
140 all docs	140 docs citations	140 times ranked	6350 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	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
4	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
5	Transductive Transfer Learning for Domain Adaptation in Brain Magnetic Resonance Image Segmentation. Frontiers in Neuroscience, 2021, 15, 608808.	1.4	5
6	Quantitative comparison of subcortical and ventricular volumetry derived from MPRAGE and MP2RAGE images using different brain morphometry software. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, 34, 903-914.	1.1	2
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	Assessment of brain volumes obtained from MP-RAGE and MP2RAGE images, quantified using different segmentation methods. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 757-767.	1.1	3
11	A fully automated pipeline for brain structure segmentation in multiple sclerosis. NeuroImage: Clinical, 2020, 27, 102306.	1.4	5
12	Improving the detection of autism spectrum disorder by combining structural and functional MRI information. NeuroImage: Clinical, 2020, 25, 102181.	1.4	59
13	Deep learning for mass detection in Full Field Digital Mammograms. Computers in Biology and Medicine, 2020, 121, 103774.	3.9	83
14	Acute and sub-acute stroke lesion segmentation from multimodal MRI. Computer Methods and Programs in Biomedicine, 2020, 194, 105521.	2.6	35
15	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
16	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
17	Supervised Domain Adaptation for Automatic Sub-cortical Brain Structure Segmentation with Minimal User Interaction. Scientific Reports, 2019, 9, 6742.	1.6	36
18	Standardized Assessment of Automatic Segmentation of White Matter Hyperintensities and Results of the WMH Segmentation Challenge. IEEE Transactions on Medical Imaging, 2019, 38, 2556-2568.	5.4	165

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19	Breast MRI and X-ray mammography registration using gradient values. Medical Image Analysis, 2019, 54, 76-87.	7.0	20
20	Multiple Sclerosis Lesion Synthesis in MRI Using an Encoder-Decoder U-NET. IEEE Access, 2019, 7, 25171-25184.	2.6	46
21	Brain structure segmentation in the presence of multiple sclerosis lesions. NeuroImage: Clinical, 2019, 22, 101709.	1.4	15
22	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
23	One-shot domain adaptation in multiple sclerosis lesion segmentation using convolutional neural networks. NeuroImage: Clinical, 2019, 21, 101638.	1.4	91
24	GridDS: a hybrid data structure for residue computation in point set matching. Machine Vision and Applications, 2019, 30, 291-307.	1.7	2
25	Automatic mass detection in mammograms using deep convolutional neural networks. Journal of Medical Imaging, 2019, 6, 1.	0.8	114
26	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
27	Multimodal Breast Parenchymal Patterns Correlation Using a Patient-Specific Biomechanical Model. IEEE Transactions on Medical Imaging, 2018, 37, 712-723.	5.4	4
28	Lesion Segmentation in Automated 3D Breast Ultrasound: Volumetric Analysis. Ultrasonic Imaging, 2018, 40, 97-112.	1.4	17
29	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
30	Objective Evaluation of Multiple Sclerosis Lesion Segmentation using a Data Management and Processing Infrastructure. Scientific Reports, 2018, 8, 13650.	1.6	171
31	Multi-atlas Parcellation in the Presence of Lesions: Application to Multiple Sclerosis. Lecture Notes in Computer Science, 2018, , 104-113.	1.0	2
32	A Method for 6D Pose Estimation of Free-Form Rigid Objects Using Point Pair Features on Range Data. Sensors, 2018, 18, 2678.	2.1	67
33	Automated sub-cortical brain structure segmentation combining spatial and deep convolutional features. Medical Image Analysis, 2018, 48, 177-186.	7.0	90
34	Mass detection in mammograms using pre-trained deep learning models. , 2018, , .		2
35	A collection of challenging motion segmentation benchmark datasets. Pattern Recognition, 2017, 61, 1-14.	5.1	6
36	Advanced MRI techniques: biomarkers in neuropsychiatric lupus. Lupus, 2017, 26, 510-516.	0.8	33

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37	Improving automated multiple sclerosis lesion segmentation with a cascaded 3D convolutional neural network approach. NeuroImage, 2017, 155, 159-168.	2.1	287
38	Evaluating the effect of multiple sclerosis lesions on automatic brain structure segmentation. NeuroImage: Clinical, 2017, 15, 228-238.	1.4	19
39	Automated tissue segmentation of MR brain images in the presence of white matter lesions. Medical Image Analysis, 2017, 35, 446-457.	7.0	55
40	Hierarchical Techniques to Improve Hybrid Point Cloud Registration. , 2017, , .		2
41	Automated Detection of Lupus White Matter Lesions in MRI. Frontiers in Neuroinformatics, 2016, 10, 33.	1.3	18
42	An SPM12 extension for multiple sclerosis lesion segmentation. , 2016, , .		2
43	Semiâ€automatic tool for motion annotation on complex video sequences. Electronics Letters, 2016, 52, 602-604.	0.5	2
44	A review on brain structures segmentation in magnetic resonance imaging. Artificial Intelligence in Medicine, 2016, 73, 45-69.	3.8	101
45	Improved Automatic Detection of New T2 Lesions in Multiple Sclerosis Using Deformation Fields. American Journal of Neuroradiology, 2016, 37, 1816-1823.	1.2	30
46	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
47	Quantifying brain tissue volume in multiple sclerosis with automated lesion segmentation and filling. NeuroImage: Clinical, 2015, 9, 640-647.	1.4	31
48	Breast Density Analysis Using an Automatic Density Segmentation Algorithm. Journal of Digital Imaging, 2015, 28, 604-612.	1.6	40
49	A toolbox for multiple sclerosis lesion segmentation. Neuroradiology, 2015, 57, 1031-1043.	1.1	76
50	A Qualitative Review on 3D Coarse Registration Methods. ACM Computing Surveys, 2015, 47, 1-36.	16.1	76
51	A study on the robustness of shape descriptors to common scanning artifacts. , 2015, , .		3
52	Comparison of 10 brain tissue segmentation methods using revisited IBSR annotations. Journal of Magnetic Resonance Imaging, 2015, 41, 93-101.	1.9	76
53	Exploring three faint source detections methods for aperture synthesis radio images. New Astronomy, 2015, 36, 86-99.	0.8	2
54	Multiscale Distilled Sensing: Astronomical source detection in long wavelength images. Astronomy and Computing, 2015, 9, 10-19.	0.8	1

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55	A New Trajectory Based Motion Segmentation Benchmark Dataset (UdG-MS15). Lecture Notes in Computer Science, 2015, , 463-470.	1.0	2
56	Multi-channel registration of fractional anisotropy and T1-weighted images in the presence of atrophy: application to multiple sclerosis. Functional Neurology, 2015, 30, 245-56.	1.3	6
57	An Experimental Benchmark for Point Set Coarse Matching. , 2015, , .		3
58	BOOST: A supervised approach for multiple sclerosis lesion segmentation. Journal of Neuroscience Methods, 2014, 237, 108-117.	1.3	28
59	One-shot segmentation of breast, pectoral muscle, and background in digitised mammograms. , 2014, , .		13
60	Intensity Based Methods for Brain MRI Longitudinal Registration. A Study on Multiple Sclerosis Patients. Neuroinformatics, 2014, 12, 365-379.	1.5	13
61	A subtraction pipeline for automatic detection of new appearing multiple sclerosis lesions in longitudinal studies. Neuroradiology, 2014, 56, 363-374.	1.1	47
62	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
63	A white matter lesion-filling approach to improve brain tissue volume measurements. NeuroImage: Clinical, 2014, 6, 86-92.	1.4	55
64	Automatic multiple sclerosis lesion detection in brain MRI by FLAIR thresholding. Computer Methods and Programs in Biomedicine, 2014, 115, 147-161.	2.6	39
65	Detecting Abnormal Mammographic Cases in Temporal Studies Using Image Registration Features. Lecture Notes in Computer Science, 2014, , 612-619.	1.0	4
66	A boosting approach for the simultaneous detection and segmentation of generic objects. Pattern Recognition Letters, 2013, 34, 1490-1498.	2.6	3
67	Joint estimation of segmentation and structure from motion. Computer Vision and Image Understanding, 2013, 117, 113-129.	3.0	17
68	A quantitative analysis of source detection approaches in optical, infrared, and radio astronomical images. Experimental Astronomy, 2013, 36, 591-629.	1.6	4
69	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
70	Multiscale distilled sensing: A source detection method for infrared and radio astronomical images. , 2013, , .		0
71	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
72	Joint probability of shape and image similarities to retrieve 2D TRUS-MR slice correspondence for prostate biopsy. , 2012, 2012, 5416-9.		2

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73	A coupled schema of probabilistic atlas and statistical shape and appearance model for 3D prostate segmentation in MR images. , 2012, , .		2
74	Spectral clustering of shape and probability prior models for automatic prostate segmentation. , 2012, 2012, 2335-8.		4
75	Weighted likelihood function of multiple statistical parameters to retrieve 2D TRUS-MR slice correspondence for prostate biopsy. , 2012, , .		1
76	Semiautomatic labeling of generic objects for enlarging annotated image databases. , 2012, , .		0
77	A hybrid framework of multiple active appearance models and global registration for 3D prostate segmentation in MRI. , 2012, , .		7
78	A shape-based statistical method to retrieve 2D TRUS-MR slice correspondence for prostate biopsy. , 2012, , .		2
79	A spline-based non-linear diffeomorphism for multimodal prostate registration. Medical Image Analysis, 2012, 16, 1259-1279.	7.0	37
80	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
81	Automated detection of multiple sclerosis lesions in serial brain MRI. Neuroradiology, 2012, 54, 787-807.	1.1	76
82	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
83	Segmentation of multiple sclerosis lesions in brain MRI: A review of automated approaches. Information Sciences, 2012, 186, 164-185.	4.0	182
84	Automatic microcalcification and cluster detection for digital and digitised mammograms. Knowledge-Based Systems, 2012, 28, 68-75.	4.0	91
85	A review of source detection approaches in astronomical images. Monthly Notices of the Royal Astronomical Society, 2012, 422, 1674-1689.	1.6	41
86	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
87	A Supervised Learning Framework for Automatic Prostate Segmentation in Trans Rectal Ultrasound Images. Lecture Notes in Computer Science, 2012, , 190-200.	1.0	6
88	A probabilistic framework for automatic prostate segmentation with a statistical model of shape and appearance. , 2011, , .		7
89	Statistical Shape and Probability Prior Model for Automatic Prostate Segmentation. , 2011, , .		2
90	Simultaneous motion segmentation and Structure from Motion. , 2011, , .		4

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91	Feature extraction for underwater visual SLAM. , 2011, , .		33
92	A Non-Linear Diffeomorphic Framework for Prostate Multimodal Registration. , 2011, , .		3
93	Revisiting Intensity-Based Image Registration Applied to Mammography. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 716-725.	3.6	36
94	A review of atlas-based segmentation for magnetic resonance brain images. Computer Methods and Programs in Biomedicine, 2011, 104, e158-e177.	2.6	336
95	Enhanced Local Subspace Affinity for feature-based motion segmentation. Pattern Recognition, 2011, 44, 454-470.	5.1	36
96	Reconstruction of non-rigid 3D shapes from stereo-motion. Pattern Recognition Letters, 2011, 32, 1020-1028.	2.6	9
97	Segmenting extended structures in radio astronomical images by filtering bright compact sources and using wavelets decomposition. , 2011, , .		6
98	Simultaneous detection and segmentation for generic objects. , 2011, , .		4
99	Prostate segmentation with local binary patterns guided active appearance models. , 2011, , .		9
100	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
101	Adaptive Motion Segmentation Algorithm Based on the Principal Angles Configuration. Lecture Notes in Computer Science, 2011, , 15-26.	1.0	13
102	SLAM based Selective Submap Joining for the Victoria Park Dataset. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 557-562.	0.4	1
103	Non-rigid metric reconstruction from perspective cameras. Image and Vision Computing, 2010, 28, 1339-1353.	2.7	14
104	A Statistical Approach for Breast Density Segmentation. Journal of Digital Imaging, 2010, 23, 527-537.	1.6	48
105	A state of the art in structured light patterns for surface profilometry. Pattern Recognition, 2010, 43, 2666-2680.	5.1	691
106	Detecting Faint Compact Sources Using Local Features and a Boosting Approach. , 2010, , .		4
107	Feature based slam using side-scan salient objects. , 2010, , .		14
108	A supervised micro-calcification detection approach in digitised mammograms. , 2010, , .		4

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109	Selective Submap Joining for underwater large scale 6-DOF SLAM. , 2010, , .		7
110	Multimodal Prostate Registration Using Thin-Plate Splines from Automatic Correspondences. , 2010, , .		5
111	Automatic Diagnosis of Masses by Using Level set Segmentation and Shape Description. , 2010, , .		6
112	Local map update for large scale SLAM. Electronics Letters, 2010, 46, 564.	0.5	5
113	A Thin-Plate Spline Based Multimodal Prostate Registration with Optimal Correspondences. , 2010, , .		10
114	Texture Guided Active Appearance Model Propagation for Prostate Segmentation. Lecture Notes in Computer Science, 2010, , 111-120.	1.0	11
115	Prostate Segmentation with Texture Enhanced Active Appearance Model. , 2010, , .		12
116	Comparison of registration methods using mamographic images. , 2010, , .		8
117	Influence of Using Manual or Automatic Breast Density Information in a Mass Detection CAD System. Academic Radiology, 2010, 17, 877-883.	1.3	13
118	A Boosting Based Approach for Automatic Micro-calcification Detection. Lecture Notes in Computer Science, 2010, , 251-258.	1.0	4
119	Enhanced Model Selection for motion segmentation. , 2009, , .		4
120	Rank estimation of trajectory matrix in motion segmentation. Electronics Letters, 2009, 45, 540.	0.5	1
121	A textural approach for mass false positive reduction in mammography. Computerized Medical Imaging and Graphics, 2009, 33, 415-422.	3.5	80
122	Breast Density Segmentation: A Comparison of Clustering and Region Based Techniques. Lecture Notes in Computer Science, 2008, , 9-16.	1.0	17
123	Recovering Euclidean deformable models from stereo-motion. , 2008, , .		2
124	Overview of surface registration techniques including loop minimization for three-dimensional modeling and visual inspection. Journal of Electronic Imaging, 2008, 17, 031103.	0.5	5
125	Eigendetection of masses considering false positive reduction and breast density information. Medical Physics, 2008, 35, 1840-1853.	1.6	22
126	Segmentation of Rigid Motion from Non-rigid 2D Trajectories. Lecture Notes in Computer Science, 2007, , 491-498.	1.0	1

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127	False Positive Reduction in Breast Mass Detection Using Two-Dimensional PCA. Lecture Notes in Computer Science, 2007, , 154-161.	1.0	11
128	False Positive Reduction in Mammographic Mass Detection Using Local Binary Patterns. , 2007, 10, 286-293.		66
129	Euclidean Reconstruction of Deformable Structure Using a Perspective Camera with Varying Intrinsic Parameters. , 2006, , .		2
130	Surface texture recognition by surface rendering. Optical Engineering, 2005, 44, 037001.	0.5	2
131	Non-rigid Face Modelling Using Shape Priors. Lecture Notes in Computer Science, 2005, , 97-108.	1.0	15
132	Non-rigid 3D Factorization for Projective Reconstruction. , 2005, , .		22
133	Colour Texture Segmentation by Region-Boundary Cooperation. Lecture Notes in Computer Science, 2004, , 250-261.	1.0	12
134	Image Texture Prediction Using Colour Photometric Stereo. Lecture Notes in Computer Science, 2002, , 355-363.	1.0	1
135	Non-Rigid Metric Shape and Motion Recovery from Uncalibrated Images Using Priors. , 0, , .		51