Georgy Gimel'farb

List of Publications by Year
in descending order

78 papers	1,875 citations	393982 19 h-index	500791 28 g-index
78 all docs	78 docs citations	78 times ranked	1855 citing authors

#	Article	IF	Citations
1	Models and methods for analyzing DCEâ€MRI: A review. Medical Physics, 2014, 41, 124301.	1.6	225
2	Precise segmentation of multimodal images. IEEE Transactions on Image Processing, 2006, 15, 952-968.	6.0	163
3	Computer-Aided Diagnosis Systems for Lung Cancer: Challenges and Methodologies. International Journal of Biomedical Imaging, 2013, 2013, 1-46.	3.0	158
4	Alzheimer rsquo s disease diagnostics by a 3D deeply supervised adaptable convolutional network. Frontiers in Bioscience - Landmark, 2018, 23, 584-596.	3.0	116
5	Precise Segmentation of 3-D Magnetic Resonance Angiography. IEEE Transactions on Biomedical Engineering, 2012, 59, 2019-2029.	2.5	96
6	A computerâ€aided diagnostic system for detecting diabetic retinopathy in optical coherence tomography images. Medical Physics, 2017, 44, 914-923.	1.6	86
7	Accurate Lungs Segmentation on CT Chest Images by Adaptive Appearance-Guided Shape Modeling. IEEE Transactions on Medical Imaging, 2017, 36, 263-276.	5.4	80
8	Accurate Automatic Analysis of Cardiac Cine Images. IEEE Transactions on Biomedical Engineering, 2012, 59, 445-455.	2.5	72
9	Probabilistic regularisation and symmetry in binocular dynamic programming stereo. Pattern Recognition Letters, 2002, 23, 431-442.	2.6	64
10	Dynamic Contrast-Enhanced MRI-Based Early Detection of Acute Renal Transplant Rejection. IEEE Transactions on Medical Imaging, 2013, 32, 1910-1927.	5.4	59
11	Accurate Automated Detection of Autism Related Corpus Callosum Abnormalities. Journal of Medical Systems, 2011, 35, 929-939.	2.2	40
12	Computer-Aided Diagnostic System for Early Detection of Acute Renal Transplant Rejection Using Diffusion-Weighted MRI. IEEE Transactions on Biomedical Engineering, 2019, 66, 539-552.	2.5	39
13	A comprehensive non-invasive framework for diagnosing prostate cancer. Computers in Biology and Medicine, 2017, 81, 148-158.	3.9	37
14	3D Kidney Segmentation from CT Images Using a Level Set Approach Guided by a Novel Stochastic Speed Function. Lecture Notes in Computer Science, 2011, 14, 587-594.	1.0	35
15	Myocardial borders segmentation from cine MR images using bidirectional coupled parametric deformable models. Medical Physics, 2013, 40, 092302.	1.6	31
16	3D Kidney Segmentation from Abdominal Images Using Spatial-Appearance Models. Computational and Mathematical Methods in Medicine, 2017, 2017, 1-10.	0.7	30
17	Shape-Appearance Guided Level-Set Deformable Model for Image Segmentation. , 2010, , .		28
18	Dyslexia Diagnostics by 3-D Shape Analysis of the Corpus Callosum. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 700-708.	3.6	28

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19	Automatic Detection of 2D and 3D Lung Nodules in Chest Spiral CT Scans. International Journal of Biomedical Imaging, 2013, 2013, 1-11.	3.0	27
20	Elastic phantoms generated by microfluidics technology: Validation of an imaged€based approach for accurate measurement of the growth rate of lung nodules. Biotechnology Journal, 2011, 6, 195-203.	1.8	23
21	Lidar guided stereo simultaneous localization and mapping (SLAM) for UAV outdoor 3-D scene reconstruction. , 2016, , .		22
22	Appearance Models for Robust Segmentation of Pulmonary Nodules in 3D LDCT Chest Images. Lecture Notes in Computer Science, 2006, 9, 662-670.	1.0	20
23	Real Time Rectification for Stereo Correspondence. , 2009, , .		20
24	Segmentation of lung region based on using parallel implementation of joint MGRF: Validation on 3D realistic lung phantoms. , 2013, , .		17
25	Image segmentation with a parametric deformable model using shape and appearance priors. , 2008, , .		16
26	Appearance analysis for diagnosing malignant lung nodules. , 2010, , .		16
27	Multi-Kinect scene reconstruction: Calibration and depth inconsistencies. , 2013, , .		16
28	Autism Diagnostics by 3D Texture Analysis of Cerebral White Matter Gyrifications. , 2007, 10, 882-890.		15
29	A NEW IMAGE ANALYSIS APPROACH FOR AUTOMATIC CLASSIFICATION OF AUTISTIC BRAINS. , 2007, , .		14
30	Appearance-based diagnostic system for early assessment of malignant lung nodules. , 2012, , .		13
31	New automated Markovâ€"Gibbs random field based framework for myocardial wall viability quantification on agent enhanced cardiac magnetic resonance images. International Journal of Cardiovascular Imaging, 2012, 28, 1683-1698.	0.7	13
32	Improving full-cardiac cycle strain estimation from tagged CMR by accurate modeling of 3D image appearance characteristics. , 2012, , .		13
33	Image-based CAD system for accurate identification of lung injury. , 2016, , .		13
34	A novel approach for accurate estimation of left ventricle global indexes from short-axis cine MRI. , 2011, , .		12
35	Fully automated framework for the analysis of myocardial firstâ€pass perfusion MR images. Medical Physics, 2014, 41, 102305.	1.6	12
36	Tsai camera calibration enhanced. , 2015, , .		12

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37	Deformable model guided by stochastic speed with application in cine images segmentation. , 2010, , .		11
38	Accurate modeling of tagged CMR 3D image appearance characteristics to improve cardiac cycle strain estimation. , 2012, , .		10
39	Symmetric dynamic programming stereo using block matching guidance. , 2013, , .		10
40	A fast stochastic framework for automatic MR brain images segmentation. PLoS ONE, 2017, 12, e0187391.	1.1	10
41	Promising results for early diagnosis of lung cancer. , 2008, , .		9
42	Robust image segmentation using learned priors. , 2009, , .		9
43	Performance analysis of multi-resolution symmetric dynamic programming stereo on GPU. , 2010, , .		9
44	Performance evaluation of an automatic MGRF-based lung segmentation approach. AIP Conference Proceedings, 2013, , .	0.3	9
45	Machine Learning Applications in Medical Image Analysis. Computational and Mathematical Methods in Medicine, 2017, 2017, 1-2.	0.7	9
46	A Novel Approach for Global Lung Registration Using 3D Markov-Gibbs Appearance Model. Lecture Notes in Computer Science, 2012, 15, 114-121.	1.0	9
47	Image Alignment Using Learning Prior Appearance Model. , 2006, , .		8
48	A new approach for automatic analysis of 3D low dose CT images for accurate monitoring the detected lung nodules. , 2008, , .		8
49	A Novel CNN Segmentation Framework Based on Using New Shape and Appearance Features. , 2018, , .		8
50	A New Adaptive Probabilistic Model of Blood Vessels for Segmenting MRA Images. Lecture Notes in Computer Science, 2006, 9, 799-806.	1.0	8
51	A generalized MRI-based CAD system for functional assessment of renal transplant. , 2017, , .		7
52	A comprehensive framework for early assessment of lung injury. , 2017, , .		7
53	Breaking the &#x2018;Ton&#x2019;: Achieving 1% depth accuracy from stereo in real time. , 2009, , .		6
54	A new framework for automated identification of pathological tissues in contrast enhanced cardiac magnetic resonance images. , 2011, , .		6

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55	Towards an intelligent vision processor. , 2008, , .		4
56	3D joint Markov-Gibbs model for segmenting the blood vessels from MRA. , 2009, , .		4
57	A novel 3D segmentation approach for segmenting the prostate from dynamic contrast enhanced MRI using current appearance and learned shape prior. , 2010, , .		4
58	Modified Akaike information criterion for estimating the number of components in a probability mixture model. , 2012, , .		4
59	Validating a new methodology for strain estimation from cardiac cine MRI. , 2013, , .		4
60	A Raspberry Pi 2-based stereo camera depth meter. , 2017, , .		4
61	Contrast/offset-invariant generic low-order MGRF models of uniform textures. , 2013, , .		3
62	A Novel Approach for Image Alignment Using a Markovâ€"Gibbs Appearance Model. Lecture Notes in Computer Science, 2006, 9, 734-741.	1.0	3
63	Fast Unsupervised Segmentation of 3D Magnetic Resonance Angiography. , 2006, , .		2
64	Comparing subspace methods for face recognition. , 2008, , .		2
65	Global image registration based on learning the prior appearance model. , 2008, , .		2
66	Texture modelling with generic translation- and contrast/offset-invariant $2^{nd}–4^{th}$-order MGRFs. , 2013, , .		2
67	Robust Face Matching Under Large Occlusions. , 2007, , .		1
68	Combined ternary patterns for texture recognition. , 2015, , .		1
69	Texture modelling with non-contiguous filters. , 2015, , .		1
70	Intelligent Vision Processor. , 2008, , .		0
71	A novel approach for global registration of medical images based on learning the prior appearance model. , 2008, , .		0
72	Modelling of elastic deformation using stereo vision and smoothed particle hydrodynamics. , 2009, , .		0

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73	Robust rigid image registration with arbitrary extrinsic photometric noise. , 2009, , .		0
74	3D object tracking with a high-resolution GPU based real-time stereo. , 2012, , .		0
75	Fast point-of-interest detection from real-time stereo. , 2012, , .		0
76	Towards structural analysis of solution spaces for ill-posed discrete 1D optimisation problems. , 2013, , .		0
77	Analysis of 3D Corpus Callosum Images in the Brains of Autistic Individuals. Advances in Medical Diagnosis, Treatment, and Care, 2016, , 159-184.	0.1	0
78	Analysis of 3D Corpus Callosum Images in the Brains of Autistic Individuals. , 0, , 1529-1554.		0