

# Dorin Comaniciu

## List of Publications by Year in Descending Order

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**Version:** 2024-04-28

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

217  
papers

12,122  
citations

40  
h-index

108  
g-index

239  
ext. papers

14,533  
ext. citations

4  
avg. IF

6.62  
L-index

#	Paper	IF	Citations
217	Automated detection of critical findings in multi-parametric brain MRI using a system of 3D neural networks. <i>Scientific Reports</i> , <b>2021</b> , 11, 6876	4.9	3
216	Machine learning automatically detects COVID-19 using chest CTs in a large multicenter cohort. <i>European Radiology</i> , <b>2021</b> , 31, 8775-8785	8	2
215	Quantifying and leveraging predictive uncertainty for medical image assessment. <i>Medical Image Analysis</i> , <b>2021</b> , 68, 101855	15.4	7
214	3D Printing, Computational Modeling, and Artificial Intelligence for Structural Heart Disease. <i>JACC: Cardiovascular Imaging</i> , <b>2021</b> , 14, 41-60	8.4	13
213	Prediction of Patient Management in COVID-19 Using Deep Learning-Based Fully Automated Extraction of Cardiothoracic CT Metrics and Laboratory Findings. <i>Korean Journal of Radiology</i> , <b>2021</b> , 22, 994-1004	6.9	5
212	Robust classification from noisy labels: Integrating additional knowledge for chest radiography abnormality assessment. <i>Medical Image Analysis</i> , <b>2021</b> , 72, 102087	15.4	4
211	Validation of a fully automated liver segmentation algorithm using multi-scale deep reinforcement learning and comparison versus manual segmentation. <i>European Journal of Radiology</i> , <b>2020</b> , 126, 108918	4.7	13
210	Artificial Intelligence in Diagnostic Imaging: Status Quo, Challenges, and Future Opportunities. <i>Journal of Thoracic Imaging</i> , <b>2020</b> , 35 Suppl 1, S11-S16	5.6	13
209	Learning cardiac anatomy <b>2020</b> , 97-116		
208	Autonomous Detection and Classification of PI-RADS Lesions in an MRI Screening Population Incorporating Multicenter-Labeled Deep Learning and Biparametric Imaging: Proof of Concept. <i>Diagnostics</i> , <b>2020</b> , 10,	3.8	15
207	Automated Quantification of CT Patterns Associated with COVID-19 from Chest CT. <i>Radiology: Artificial Intelligence</i> , <b>2020</b> , 2, e200048	8.7	56
206	Combo loss: Handling input and output imbalance in multi-organ segmentation. <i>Computerized Medical Imaging and Graphics</i> , <b>2019</b> , 75, 24-33	7.6	74
205	Artificial Intelligence in Cardiovascular Imaging: JACC State-of-the-Art Review. <i>Journal of the American College of Cardiology</i> , <b>2019</b> , 73, 1317-1335	15.1	186
204	Anisotropic Hybrid Network for Cross-Dimension Transferable Feature Learning in 3D Medical Images. <i>Advances in Computer Vision and Pattern Recognition</i> , <b>2019</b> , 199-216	1.1	1
203	Select, Attend, and Transfer: Light, Learnable Skip Connections. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 417-425	0.9	5
202	Multi-Scale Deep Reinforcement Learning for Real-Time 3D-Landmark Detection in CT Scans. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , <b>2019</b> , 41, 176-189	13.3	122
201	Reply to Liu et al. <i>Journal of Applied Physiology</i> , <b>2018</b> , 125, 1353	3.7	

200	Nonlinear Adaptively Learned Optimization for Object Localization in 3D Medical Images. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 254-262	0.9	1
199	3D Anisotropic Hybrid Network: Transferring Convolutional Features from 2D Images to 3D Anisotropic Volumes. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 851-858	0.9	51
198	Towards intelligent robust detection of anatomical structures in incomplete volumetric data. <i>Medical Image Analysis</i> , <b>2018</b> , 48, 203-213	15.4	21
197	Personalized mitral valve closure computation and uncertainty analysis from 3D echocardiography. <i>Medical Image Analysis</i> , <b>2017</b> , 35, 238-249	15.4	9
196	Personalized blood flow computations: A hierarchical parameter estimation framework for tuning boundary conditions. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2017</b> , 33, e02803	2.6	7
195	Cascaded deep decision networks for classification of endoscopic images <b>2017</b> ,		1
194	Comprehensive preclinical evaluation of a multi-physics model of liver tumor radiofrequency ablation. <i>International Journal of Computer Assisted Radiology and Surgery</i> , <b>2017</b> , 12, 1543-1559	3.9	9
193	Deep Image-to-Image Recurrent Network with Shape Basis Learning for Automatic Vertebra Labeling in Large-Scale 3D CT Volumes. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 498-506	0.9	17
192	Robust Multi-scale Anatomical Landmark Detection in Incomplete 3D-CT Data. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 194-202	0.9	12
191	Towards patient-specific modeling of mitral valve repair: 3D transesophageal echocardiography-derived parameter estimation. <i>Medical Image Analysis</i> , <b>2017</b> , 35, 599-609	15.4	18
190	Deep Learning Based Automatic Segmentation of Pathological Kidney in CT: Local Versus Global Image Context. <i>Advances in Computer Vision and Pattern Recognition</i> , <b>2017</b> , 241-255	1.1	6
189	Automatic Vertebra Labeling in Large-Scale 3D CT Using Deep Image-to-Image Network with Message Passing and Sparsity Regularization. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 633-644	0.9	42
188	Automatic Liver Segmentation Using an Adversarial Image-to-Image Network. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 507-515	0.9	77
187	Robust Landmark Detection in Volumetric Data with Efficient 3D Deep Learning. <i>Advances in Computer Vision and Pattern Recognition</i> , <b>2017</b> , 49-61	1.1	
186	Challenges to Validate Multi-Physics Model of Liver Tumor Radiofrequency Ablation from Pre-clinical Data <b>2016</b> , 27-38		1
185	A self-taught artificial agent for multi-physics computational model personalization. <i>Medical Image Analysis</i> , <b>2016</b> , 34, 52-64	15.4	13
184	Marginal Space Deep Learning: Efficient Architecture for Volumetric Image Parsing. <i>IEEE Transactions on Medical Imaging</i> , <b>2016</b> , 35, 1217-1228	11.7	96
183	Comparison of Fractional Flow Reserve Based on Computational Fluid Dynamics Modeling Using Coronary Angiographic Vessel Morphology Versus Invasively Measured Fractional Flow Reserve. <i>American Journal of Cardiology</i> , <b>2016</b> , 117, 29-35	3	46

182	An Artificial Agent for Anatomical Landmark Detection in Medical Images. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 229-237	0.9	58
181	A machine-learning approach for computation of fractional flow reserve from coronary computed tomography. <i>Journal of Applied Physiology</i> , <b>2016</b> , 121, 42-52	3.7	192
180	Deep Decision Network for Multi-class Image Classification <b>2016</b> ,		30
179	Efficient Lattice Boltzmann Solver for Patient-Specific Radiofrequency Ablation of Hepatic Tumors. <i>IEEE Transactions on Medical Imaging</i> , <b>2015</b> , 34, 1576-1589	11.7	29
178	Robust object tracking using semi-supervised appearance dictionary learning. <i>Pattern Recognition Letters</i> , <b>2015</b> , 62, 17-23	4.7	27
177	3D Deep Learning for Efficient and Robust Landmark Detection in Volumetric Data. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 565-572	0.9	62
176	A parameter estimation framework for patient-specific hemodynamic computations. <i>Journal of Computational Physics</i> , <b>2015</b> , 281, 316-333	4.1	18
175	Noninvasive hemodynamic assessment, treatment outcome prediction and follow-up of aortic coarctation from MR imaging. <i>Medical Physics</i> , <b>2015</b> , 42, 2143-56	4.4	11
174	Towards Personalized Cardiology: Multi-Scale Modeling of the Failing Heart. <i>PLoS ONE</i> , <b>2015</b> , 10, e0134869	3.7	53
173	Estimation of Regional Electrical Properties of the Heart from 12-Lead ECG and Images. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 204-212	0.9	3
172	Multi-modal Validation Framework of Mitral Valve Geometry and Functional Computational Models. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 239-248	0.9	1
171	Propagation of Myocardial Fibre Architecture Uncertainty on Electromechanical Model Parameter Estimation: A Case Study. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 448-456	0.9	5
170	Marginal Space Deep Learning: Efficient Architecture for Detection in Volumetric Image Data. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 710-718	0.9	5
169	Vito $\square$ Generic Agent for Multi-physics Model Personalization: Application to Heart Modeling. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 442-449	0.9	1
168	Data-Driven Model Reduction for Fast, High Fidelity Atrial Electrophysiology Computations. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 466-474	0.9	
167	Robust Live Tracking of Mitral Valve Annulus for Minimally-Invasive Intervention Guidance. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 439-446	0.9	2
166	Marginal Space Learning for Medical Image Analysis <b>2014</b> ,		10
165	Multi-part modeling and segmentation of left atrium in C-arm CT for image-guided ablation of atrial fibrillation. <i>IEEE Transactions on Medical Imaging</i> , <b>2014</b> , 33, 318-31	11.7	21

164	Automatic detection and measurement of structures in fetal head ultrasound volumes using sequential estimation and Integrated Detection Network (IDN). <i>IEEE Transactions on Medical Imaging</i> , <b>2014</b> , 33, 1054-70	11.7	24
163	Data-driven estimation of cardiac electrical diffusivity from 12-lead ECG signals. <i>Medical Image Analysis</i> , <b>2014</b> , 18, 1361-76	15.4	36
162	Nonrigid Object Segmentation: Application to Four-Chamber Heart Segmentation <b>2014</b> , 159-198		
161	Automatic image-to-model framework for patient-specific electromechanical modeling of the heart <b>2014</b> ,		3
160	Model based non-invasive estimation of PV loop from echocardiography. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 6774-7	0.9	6
159	Marginal Space Learning <b>2014</b> , 25-65		4
158	Lung segmentation from CT with severe pathologies using anatomical constraints. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 17, 804-11	0.9	9
157	Robust image-based estimation of cardiac tissue parameters and their uncertainty from noisy data. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 17, 9-16	0.9	12
156	Parameter Estimation for Personalization of Liver Tumor Radiofrequency Ablation. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 3-12	0.9	7
155	Model-Based Estimation of 4D Relative Pressure Map from 4D Flow MR Images. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 236-243	0.9	4
154	Comparison of Marginal Space Learning and Full Space Learning in 2D <b>2014</b> , 67-78		
153	Part-Based Object Detection and Segmentation <b>2014</b> , 103-135		
152	Constrained Marginal Space Learning <b>2014</b> , 79-101		
151	Applications of Marginal Space Learning in Medical Imaging <b>2014</b> , 199-256		
150	Optimal Mean Shape for Nonrigid Object Detection and Segmentation <b>2014</b> , 137-158		
149	Spine detection in CT and MR using iterated marginal space learning. <i>Medical Image Analysis</i> , <b>2013</b> , 17, 1283-92	15.4	85
148	Image-based Co-Registration of Angiography and Intravascular Ultrasound Images. <i>IEEE Transactions on Medical Imaging</i> , <b>2013</b> , 32, 2238-49	11.7	16
147	Non-invasive hemodynamic assessment of aortic coarctation: validation with in vivo measurements. <i>Annals of Biomedical Engineering</i> , <b>2013</b> , 41, 669-81	4.7	45

146	Lymph node detection and segmentation in chest CT data using discriminative learning and a spatial prior. <i>Medical Image Analysis</i> , <b>2013</b> , 17, 254-70	15.4	40
145	Learning-Based Detection and Tracking in Medical Imaging: A Probabilistic Approach. <i>Lecture Notes in Computational Vision and Biomechanics</i> , <b>2013</b> , 209-235	0.3	8
144	Image-based computational models for TAVI planning: from CT images to implant deployment. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 16, 395-402	0.9	8
143	Advanced intervention planning for Transcatheter Aortic Valve Implantations (TAVI) from CT using volumetric models <b>2013</b> ,		1
142	A novel coupling algorithm for computing blood flow in viscoelastic arterial models. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2013</b> , 2013, 727-30	0.9	3
141	Automatic Detection and Quantification of Mitral Regurgitation on TTE with Application to Assist Mitral Clip Planning and Evaluation. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 33-41	0.9	3
140	Data-Driven Reduction of a Cardiac Myofilament Model. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 232-240	0.9	4
139	From Medical Images to Fast Computational Models of Heart Electromechanics: An Integrated Framework towards Clinical Use. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 249-258	0.9	4
138	Lattice Boltzmann method for fast patient-specific simulation of liver tumor ablation from CT images. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 16, 323-30	0.9	10
137	Fast data-driven calibration of a cardiac electrophysiology model from images and ECG. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 16, 1-8	0.9	7
136	Automatic detection and segmentation of lymph nodes from CT data. <i>IEEE Transactions on Medical Imaging</i> , <b>2012</b> , 31, 240-50	11.7	50
135	Automatic aorta segmentation and valve landmark detection in C-arm CT for transcatheter aortic valve implantation. <i>IEEE Transactions on Medical Imaging</i> , <b>2012</b> , 31, 2307-21	11.7	65
134	Complete valvular heart apparatus model from 4D cardiac CT. <i>Medical Image Analysis</i> , <b>2012</b> , 16, 1003-14	15.4	49
133	An integrated framework for finite-element modeling of mitral valve biomechanics from medical images: application to MitralClip intervention planning. <i>Medical Image Analysis</i> , <b>2012</b> , 16, 1330-46	15.4	71
132	A Discriminative Distance Learning-Based CBIR Framework for Characterization of Indeterminate Liver Lesions. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 92-104	0.9	7
131	Fast tracking of catheters in 2D fluoroscopic images using an integrated CPU-GPU framework <b>2012</b> ,		4
130	Precise segmentation of the left atrium in C-arm CT volumes with applications to atrial fibrillation ablation <b>2012</b> ,		8
129	A framework for personalization of coronary flow computations during rest and hyperemia. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2012</b> , 2012, 6665-8	0.9	21

128	Personalized learning-based segmentation of thoracic aorta and main branches for diagnosis and treatment planning <b>2012</b> ,		4
127	Real time assistance for stent positioning and assessment by self-initialized tracking. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 15, 405-13	0.9	3
126	Data-driven breast decompression and lesion mapping from digital breast tomosynthesis. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 15, 438-46	0.9	2
125	LBM-EP: Lattice-Boltzmann method for fast cardiac electrophysiology simulation from 3D images. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 15, 33-40	0.9	13
124	Hemodynamic assessment of pre- and post-operative aortic coarctation from MRI. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 15, 486-93	0.9	4
123	Ultrasound and fluoroscopic images fusion by autonomous ultrasound probe detection. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 15, 544-51	0.9	12
122	Automatic Localization of Balloon Markers and Guidewire in Rotational Fluoroscopy with Application to 3D Stent Reconstruction. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 428-441	0.9	5
121	Computational Fluid Dynamics Framework for Large-Scale Simulation in Pediatric Cardiology <b>2012</b> , 97-106		1
120	Learning-based hypothesis fusion for robust catheter tracking in 2D X-ray fluoroscopy <b>2011</b> ,		23
119	Morphologica l and Functional Modeling of the Heart Valves and Chambers. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , <b>2011</b> , 157-187	0.5	
118	Detection of 3D Spinal Geometry Using Iterated Marginal Space Learning. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 96-105	0.9	23
117	Fully automatic segmentation of wrist bones for arthritis patients <b>2011</b> ,		9
116	Combined semantic and similarity search in medical image databases <b>2011</b> ,		9
115	A probabilistic model for automatic segmentation of the esophagus in 3-D CT scans. <i>IEEE Transactions on Medical Imaging</i> , <b>2011</b> , 30, 1252-64	11.7	19
114	Prediction based collaborative trackers (PCT): a robust and accurate approach toward 3D medical object tracking. <i>IEEE Transactions on Medical Imaging</i> , <b>2011</b> , 30, 1921-32	11.7	41
113	Machine learning based vesselness measurement for coronary artery segmentation in cardiac CT volumes <b>2011</b> ,		22
112	Robust discriminative wire structure modeling with application to stent enhancement in fluoroscopy <b>2011</b> ,		9
111	Patient-specific modelling of whole heart anatomy, dynamics and haemodynamics from four-dimensional cardiac CT images. <i>Interface Focus</i> , <b>2011</b> , 1, 286-96	3.9	87



110	Automatic cardiac flow quantification on 3D volume color Doppler data <b>2011</b> ,		9
109	Learning distance function for regression-based 4D pulmonary trunk model reconstruction estimated from sparse MRI data <b>2011</b> ,		2
108	Vascular landmark detection in 3D CT data <b>2011</b> ,		3
107	Automatic Delineation of Left and Right Ventricles in Cardiac MRI Sequences Using a Joint Ventricular Model. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 250-258	0.9	12
106	Patient-Specific Model of Left Heart Anatomy, Dynamics and Hemodynamics from 4D TEE: A First Validation Study. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 341-349	0.9	5
105	Image-based device tracking for the co-registration of angiography and intravascular ultrasound images. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 161-8	0.9	7
104	Detection, grading and classification of coronary stenoses in computed tomography angiography. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 25-32	0.9	29
103	Efficient detection of native and bypass coronary ostia in cardiac CT volumes: anatomical vs. pathological structures. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 403-10	0.9	5
102	Automatic extraction of 3D dynamic left ventricle model from 2D rotational angiocardiogram. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 471-8	0.9	6
101	Automatic view planning for cardiac MRI acquisition. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 479-86	0.9	22
100	Multi-part left atrium modeling and segmentation in C-arm CT volumes for atrial fibrillation ablation. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 487-95	0.9	9
99	Robust physically-constrained modeling of the mitral valve and subvalvular apparatus. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 504-11	0.9	10
98	Segmentation Based Features for Lymph Node Detection from 3-D Chest CT. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 91-99	0.9	2
97	Accurate Regression-Based 4D Mitral Valve Surface Reconstruction from 2D+t MRI Slices. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 282-290	0.9	
96	Robust and fast contrast inflow detection for 2D X-ray fluoroscopy. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 243-50	0.9	5
95	A Framework of Wire Tracking in Image Guided Interventions. <i>Advances in Computer Vision and Pattern Recognition</i> , <b>2011</b> , 159-177	1.1	
94	Model-based fusion of multi-modal volumetric images: application to transcatheter valve procedures. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 219-26	0.9	3
93	Automatic aorta segmentation and valve landmark detection in C-arm CT: application to aortic valve implantation. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 476-83	0.9	23



92	Aortic valve and ascending aortic root modeling from 3D and 3D+t CT <b>2010</b> ,		3
91	Learning-based 3D myocardial motion flowestimation using high frame rate volumetric ultrasound data <b>2010</b> ,		5
90	Using needle detection and tracking for motion compensation in abdominal interventions <b>2010</b> ,		5
89	Semantic annotation of medical images <b>2010</b> ,		27
88	Fast and Automatic Heart Isolation in 3D CT Volumes: Optimal Shape Initialization. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 84-91	0.9	12
87	Learning discriminative distance functions for valve retrieval and improved decision support in valvular heart disease <b>2010</b> ,		2
86	Database-guided breast tumor detection and segmentation in 2D ultrasound images <b>2010</b> ,		9
85	Multiple object detection by sequential monte carlo and Hierarchical Detection Network <b>2010</b> ,		14
84	Lymph node detection in 3-D chest CT using a spatial prior probability <b>2010</b> ,		13
83	Search strategies for multiple landmark detection by submodular maximization <b>2010</b> ,		23
82	Detection and retrieval of cysts in joint ultrasound B-mode and elasticity breast images <b>2010</b> ,		4
81	Patient-specific modeling of left heart anatomy, dynamics and hemodynamics from high resolution 4D CT <b>2010</b> ,		12
80	Patient-specific modeling and quantification of the aortic and mitral valves from 4-D cardiac CT and TEE. <i>IEEE Transactions on Medical Imaging</i> , <b>2010</b> , 29, 1636-51	11.7	147
79	Complete valvular heart apparatus model from 4D cardiac CT. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 218-26	0.9	10
78	Automatic detection and segmentation of axillary lymph nodes. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 28-36	0.9	13
77	Cardiac anchoring in MRI through context modeling. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 383-90.	0.9	17
76	Cross-modality assessment and planning for pulmonary trunk treatment using CT and MRI imaging. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 460-7	0.9	2
75	Volumetric Myocardial Mechanics from 3D+t Ultrasound Data with Multi-model Tracking. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 184-193	0.9	12

74	Patient-Specific Modeling of the Heart: Applications to Cardiovascular Disease Management. <i>Lecture Notes in Computer Science, 2010, 14-24</i>	0.9	3
73	Fast Automatic Detection of Calcified Coronary Lesions in 3D Cardiac CT Images. <i>Lecture Notes in Computer Science, 2010, 1-9</i>	0.9	15
72	Graph based interactive detection of curve structures in 2D fluoroscopy. <i>Lecture Notes in Computer Science, 2010, 13, 269-77</i>	0.9	4
71	Computational Decision Support for Percutaneous Aortic Valve Implantation. <i>Lecture Notes in Computer Science, 2010, 247-256</i>	0.9	1
70	Model-based esophagus segmentation from CT scans using a spatial probability map. <i>Lecture Notes in Computer Science, 2010, 13, 95-102</i>	0.9	3
69	Robust guidewire tracking in fluoroscopy <b>2009,</b>		32
68	Automatic fetal face detection from ultrasound volumes via learning 3D and 2D information <b>2009,</b>		1
67	Robust motion estimation using trajectory spectrum learning: Application to aortic and mitral valve modeling from 4D TEE <b>2009,</b>		4
66	Estimating the body portion of CT volumes by matching histograms of visual words <b>2009,</b>		8
65	Left ventricle endocardium segmentation for cardiac CT volumes using an optimal smooth surface <b>2009,</b>		3
64	Model-driven physiological assessment of the mitral valve from 4D TEE <b>2009,</b>		5
63	Automatic left ventricle detection in MRI images using marginal space learning and component-based voting <b>2009,</b>		4
62	Shape-based diagnosis of the aortic valve <b>2009,</b>		5
61	Coronary DSA: enhancing coronary tree visibility through discriminative learning and robust motion estimation <b>2009,</b>		5
60	Hierarchical parsing and semantic navigation of full body CT data <b>2009,</b>		74
59	Hierarchical guidewire tracking in fluoroscopic sequences <b>2009,</b>		3
58	User-constrained guidewire localization in fluoroscopy <b>2009,</b>		5
57	Personalized modeling and assessment of the aortic-mitral coupling from 4D TEE and CT. <i>Lecture Notes in Computer Science, 2009, 12, 767-75</i>	0.9	13

56	Constrained marginal space learning for efficient 3D anatomical structure detection in medical images <b>2009</b> ,		16
55	Automatic ovarian follicle quantification from 3D ultrasound data using global/local context with database guided segmentation <b>2009</b> ,		15
54	Robust object detection using marginal space learning and ranking-based multi-detector aggregation: Application to left ventricle detection in 2D MRI images <b>2009</b> ,		9
53	Visual tracking by continuous density propagation in sequential bayesian filtering framework. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , <b>2009</b> , 31, 919-30	13.3	29
52	Discriminative Joint Context for Automatic Landmark Set Detection from a Single Cardiac MR Long Axis Slice. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 457-465	0.9	11
51	Marginal space learning for efficient detection of 2D/3D anatomical structures in medical images. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 21, 411-22	0.9	28
50	Coronary tree extraction using motion layer separation. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 116-23	0.9	9
49	Personalized pulmonary trunk modeling for intervention planning and valve assessment estimated from CT data. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 17-25	0.9	4
48	Fast automatic segmentation of the esophagus from 3D CT data using a probabilistic model. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 255-62	0.9	13
47	Dynamic layer separation for coronary DSA and enhancement in fluoroscopic sequences. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 877-84	0.9	13
46	Fast and robust 3-D MRI brain structure segmentation. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 575-83		10
45	Four-chamber heart modeling and automatic segmentation for 3-D cardiac CT volumes using marginal space learning and steerable features. <i>IEEE Transactions on Medical Imaging</i> , <b>2008</b> , 27, 1668-81	11.7	409
44	Detection and measurement of fetal anatomies from ultrasound images using a constrained probabilistic boosting tree. <i>IEEE Transactions on Medical Imaging</i> , <b>2008</b> , 27, 1342-55	11.7	125
43	Hierarchical, learning-based automatic liver segmentation <b>2008</b> ,		82
42	Sequential kernel density approximation and its application to real-time visual tracking. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , <b>2008</b> , 30, 1186-97	13.3	101
41	Semantic-based indexing of fetal anatomies from 3-D ultrasound data using global/semi-local context and sequential sampling <b>2008</b> ,		18
40	Conditional density learning via regression with application to deformable shape segmentation <b>2008</b> ,		1
39	Accurate polyp segmentation for 3D CT colongraphy using multi-staged probabilistic binary learning and compositional model <b>2008</b> ,		13

38	Discriminative Learning for Deformable Shape Segmentation: A Comparative Study. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 711-724	0.9	2
37	AutoMPR: Automatic detection of standard planes in 3D echocardiography <b>2008</b> ,		3
36	A learning based hierarchical model for vessel segmentation <b>2008</b> ,		7
35	A FAST AND ACCURATE TRACKING ALGORITHM OF LEFT VENTRICLES IN 3D ECHOCARDIOGRAPHY <b>2008</b> , 5, 221-224	1.5	12
34	3D ultrasound tracking of the left ventricle using one-step forward prediction and data fusion of collaborative trackers <b>2008</b> ,		3
33	Four-chamber heart modeling and automatic segmentation for 3D cardiac CT volumes <b>2008</b> ,		6
32	Automatic mitral valve inflow measurements from Doppler echocardiography. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 11, 983-90	0.9	7
31	Dynamic model-driven quantitative and visual evaluation of the aortic valve from 4D CT. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 11, 686-94	0.9	13
30	A discriminative model-constrained graph cuts approach to fully automated pediatric brain tumor segmentation in 3-D MRI. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 11, 67-75	0.9	42
29	AutoGate: fast and automatic Doppler gate localization in B-mode echocardiogram. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 11, 230-7	0.9	6
28	Simultaneous Detection and Registration for Ileo-Cecal Valve Detection in 3D CT Colonography. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 465-478	0.9	12
27	Hierarchical Learning of Curves Application to Guidewire Localization in Fluoroscopy <b>2007</b> ,		32
26	Joint Real-time Object Detection and Pose Estimation Using Probabilistic Boosting Network <b>2007</b> ,		27
25	A boosting regression approach to medical anatomy detection <b>2007</b> ,		19
24	Fast Automatic Heart Chamber Segmentation from 3D CT Data Using Marginal Space Learning and Steerable Features <b>2007</b> ,		77
23	Shape regression machine. <i>Information Processing in Medical Imaging</i> , <b>2007</b> , 20, 13-25		40
22	Automatic fetal measurements in ultrasound using constrained probabilistic boosting tree <b>2007</b> , 10, 571-9		10
21	Reliable Detection of Overtaking Vehicles Using Robust Information Fusion. <i>IEEE Transactions on Intelligent Transportation Systems</i> , <b>2006</b> , 7, 401-414	6.1	42

20	Total variation models for variable lighting face recognition. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , <b>2006</b> , 28, 1519-24	13.3	310
19	Pairwise active appearance model and its application to echocardiography tracking. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 9, 736-43	0.9	3
18	A Learning Based Approach for 3D Segmentation and Colon Detagging. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 436-448	0.9	10
17	Example Based Non-rigid Shape Detection. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 423-436	0.9	4
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15	An information fusion framework for robust shape tracking. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , <b>2005</b> , 27, 115-29	13.3	70
14	Multi-scale Vessel Boundary Detection. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 388-398	0.9	3
13	A common framework for nonlinear diffusion, adaptive smoothing, bilateral filtering and mean shift. <i>Image and Vision Computing</i> , <b>2004</b> , 22, 73-81	3.7	154
12	Robust real-time myocardial border tracking for echocardiography: an information fusion approach. <i>IEEE Transactions on Medical Imaging</i> , <b>2004</b> , 23, 849-60	11.7	73
11	Robust 3D Segmentation of Pulmonary Nodules in Multislice CT Images. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 881-889	0.9	7
10	Coupled-Contour Tracking through Non-orthogonal Projections and Fusion for Echocardiography. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 336-349	0.9	4
9	Real-Time Multi-model Tracking of Myocardium in Echocardiography Using Robust Information Fusion. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 777-785	0.9	6
8	Dissimilarity computation through low rank corrections. <i>Pattern Recognition Letters</i> , <b>2003</b> , 24, 227-236	4.7	2
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