# Dorin Comaniciu

#### List of Publications by Citations

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217
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12,122
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239
ext. papers

14,533
ext. citations

40
h-index
g-index

6.62
L-index

#	Paper	IF	Citations
217	. IEEE Transactions on Pattern Analysis and Machine Intelligence, <b>2002</b> , 24, 603-619	13.3	6600
216	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
215	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
214	An algorithm for data-driven bandwidth selection. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , <b>2003</b> , 25, 281-288	13.3	221
213	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
212	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
211	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
210	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
209	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
208	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
207	Distribution Free Decomposition of Multivariate Data. <i>Pattern Analysis and Applications</i> , <b>1999</b> , 2, 22-30	2.3	105
206	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
205	Image-guided decision support system for pathology. <i>Machine Vision and Applications</i> , <b>1999</b> , 11, 213-22-	42.8	98
204	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
203	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
202	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
201	Hierarchical, learning-based automatic liver segmentation 2008,		82

#### (2013-2005)

200	Robust anisotropic Gaussian fitting for volumetric characterization of pulmonary nodules in multislice CT. <i>IEEE Transactions on Medical Imaging</i> , <b>2005</b> , 24, 409-23	11.7	82	
199	Fast Automatic Heart Chamber Segmentation from 3D CT Data Using Marginal Space Learning and Steerable Features <b>2007</b> ,		77	
198	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	
197	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	
196	Hierarchical parsing and semantic navigation of full body CT data 2009,		74	
195	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	
194	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	
193	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	
192	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	
191	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	
190	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	
189	Automated Quantification of CT Patterns Associated with COVID-19 from Chest CT. <i>Radiology:</i> Artificial Intelligence, <b>2020</b> , 2, e200048	8.7	56	
188	Towards Personalized Cardiology: Multi-Scale Modeling of the Failing Heart. <i>PLoS ONE</i> , <b>2015</b> , 10, e0134	18 <del>69</del>	53	
187	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	
186	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	
185	Complete valvular heart apparatus model from 4D cardiac CT. <i>Medical Image Analysis</i> , <b>2012</b> , 16, 1003-14	115.4	49	
184	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	
183	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	

182	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
181	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
180	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
179	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
178	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
177	Shape regression machine. <i>Information Processing in Medical Imaging</i> , <b>2007</b> , 20, 13-25		40
176	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
175	Robust guidewire tracking in fluoroscopy <b>2009</b> ,		32
174	Hierarchical Learning of Curves Application to Guidewire Localization in Fluoroscopy 2007,		32
173	Deep Decision Network for Multi-class Image Classification <b>2016</b> ,		30
173 172	Deep Decision Network for Multi-class Image Classification 2016,  Efficient Lattice Boltzmann Solver for Patient-Specific Radiofrequency Ablation of Hepatic Tumors.  IEEE Transactions on Medical Imaging, 2015, 34, 1576-1589	11.7	30 29
	Efficient Lattice Boltzmann Solver for Patient-Specific Radiofrequency Ablation of Hepatic Tumors.	11.7	
172	Efficient Lattice Boltzmann Solver for Patient-Specific Radiofrequency Ablation of Hepatic Tumors.  IEEE Transactions on Medical Imaging, 2015, 34, 1576-1589  Visual tracking by continuous density propagation in sequential bayesian filtering framework. IEEE	,	29
172 171	Efficient Lattice Boltzmann Solver for Patient-Specific Radiofrequency Ablation of Hepatic Tumors.  IEEE Transactions on Medical Imaging, 2015, 34, 1576-1589  Visual tracking by continuous density propagation in sequential bayesian filtering framework. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 919-30  Detection, grading and classification of coronary stenoses in computed tomography angiography.	13.3	29
172 171 170	Efficient Lattice Boltzmann Solver for Patient-Specific Radiofrequency Ablation of Hepatic Tumors.  **IEEE Transactions on Medical Imaging, 2015, 34, 1576-1589**  Visual tracking by continuous density propagation in sequential bayesian filtering framework. **IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 919-30**  Detection, grading and classification of coronary stenoses in computed tomography angiography.  **Lecture Notes in Computer Science, 2011, 14, 25-32**  Marginal space learning for efficient detection of 2D/3D anatomical structures in medical images.	0.9	29 29 29
172 171 170 169	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  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  Detection, grading and classification of coronary stenoses in computed tomography angiography. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 25-32  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  Robust object tracking using semi-supervised appearance dictionary learning. <i>Pattern Recognition</i>	0.9	29 29 29 28
172 171 170 169 168	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  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  Detection, grading and classification of coronary stenoses in computed tomography angiography. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 25-32  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  Robust object tracking using semi-supervised appearance dictionary learning. <i>Pattern Recognition Letters</i> , <b>2015</b> , 62, 17-23	0.9	29 29 29 28 27

164	Learning-based hypothesis fusion for robust catheter tracking in 2D X-ray fluoroscopy <b>2011</b> ,		23
163	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
162	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
161	Search strategies for multiple landmark detection by submodular maximization <b>2010</b> ,		23
160	Machine learning based vesselness measurement for coronary artery segmentation in cardiac CT volumes <b>2011</b> ,		22
159	Automatic view planning for cardiac MRI acquisition. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 14, 479-86	<b>6</b> 0.9	22
158	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
157	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
156	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
155	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
154	A boosting regression approach to medical anatomy detection 2007,		19
153	A parameter estimation framework for patient-specific hemodynamic computations. <i>Journal of Computational Physics</i> , <b>2015</b> , 281, 316-333	4.1	18
152	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
151	Semantic-based indexing of fetal anatomies from 3-D ultrasound data using global/semi-local context and sequential sampling <b>2008</b> ,		18
150	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
149	Cardiac anchoring in MRI through context modeling. Lecture Notes in Computer Science, 2010, 13, 383-90	00.9	17
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	Constrained marginal space learning for efficient 3D anatomical structure detection in medical images <b>2009</b> ,		16

146	Automatic ovarian follicle quantification from 3D ultrasound data using global/local context with database guided segmentation <b>2009</b> ,		15
145	Fast Automatic Detection of Calcified Coronary Lesions in 3D Cardiac CT Images. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 1-9	0.9	15
144	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
143	Multiple object detection by sequential monte carlo and Hierarchical Detection Network 2010,		14
142	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, 10891	8 <sup>4.7</sup>	13
141	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
140	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
139	Lymph node detection in 3-D chest CT using a spatial prior probability <b>2010</b> ,		13
138	Personalized modeling and assessment of the aortic-mitral coupling from 4D TEE and CT. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 767-75	0.9	13
137	Accurate polyp segmentation for 3D CT colongraphy using multi-staged probabilistic binary learning and compositional model <b>2008</b> ,		13
136	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
135	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
134	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
133	Automatic detection and segmentation of axillary lymph nodes. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 28-36	0.9	13
132	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
131	3D Printing, Computational Modeling, and Artificial Intelligence for Structural Heart Disease. <i>JACC:</i> Cardiovascular Imaging, <b>2021</b> , 14, 41-60	8.4	13
130	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
129	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

128	Patient-specific modeling of left heart anatomy, dynamics and hemodynamics from high resolution 4D CT <b>2010</b> ,		12	
127	A FAST AND ACCURATE TRACKING ALGORITHM OF LEFT VENTRICLES IN 3D ECHOCARDIOGRAPHY <b>2008</b> , 5, 221-224	1.5	12	
126	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	
125	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	
124	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	
123	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	
122	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	
121	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	
120	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	
119	Marginal Space Learning for Medical Image Analysis <b>2014</b> ,		10	
118	Automatic fetal measurements in ultrasound using constrained probabilistic boosting tree <b>2007</b> , 10, 571-9		10	
117	Fast and robust 3-D MRI brain structure segmentation. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 57	5-83)	10	
116	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	
115	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	
115		0.9	10	
	Notes in Computer Science, 2011, 14, 504-11  Lattice Boltzmann method for fast patient-specific simulation of liver tumor ablation from CT			
114	Notes in Computer Science, 2011, 14, 504-11  Lattice Boltzmann method for fast patient-specific simulation of liver tumor ablation from CT images. Lecture Notes in Computer Science, 2013, 16, 323-30  A Learning Based Approach for 3D Segmentation and Colon Detagging. Lecture Notes in Computer	0.9	10	

110	Fully automatic segmentation of wrist bones for arthritis patients 2011,		9
109	Combined semantic and similarity search in medical image databases 2011,		9
108	Database-guided breast tumor detection and segmentation in 2D ultrasound images 2010,		9
107	Robust discriminative wire structure modeling with application to stent enhancement in fluoroscopy <b>2011</b> ,		9
106	Automatic cardiac flow quantification on 3D volume color Doppler data 2011,		9
105	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
104	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
103	Coronary tree extraction using motion layer separation. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 12, 116-23	0.9	9
102	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
101	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
100	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
99	Estimating the body portion of CT volumes by matching histograms of visual words 2009,		8
98	Precise segmentation of the left atrium in C-arm CT volumes with applications to atrial fibrillation ablation <b>2012</b> ,		8
97	Component Fusion for Face Detection in the Presence of Heteroscedastic Noise. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 434-441	0.9	8
96	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
95	A Discriminative Distance LearningBased CBIR Framework for Characterization of Indeterminate Liver Lesions. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 92-104	0.9	7
94	A learning based hierarchical model for vessel segmentation 2008,		7
93	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

## (2019-2008)

92	Automatic mitral valve inflow measurements from Doppler echocardiography. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 11, 983-90	0.9	7
91	Parameter Estimation for Personalization of Liver Tumor Radiofrequency Ablation. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 3-12	0.9	7
90	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
89	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
88	Quantifying and leveraging predictive uncertainty for medical image assessment. <i>Medical Image Analysis</i> , <b>2021</b> , 68, 101855	15.4	7
87	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
86	Four-chamber heart modeling and automatic segmentation for 3D cardiac CT volumes 2008,		6
85	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
84	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
83	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
82	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
81	Learning-based 3D myocardial motion flowestimation using high frame rate volumetric ultrasound data <b>2010</b> ,		5
80	Using needle detection and tracking for motion compensation in abdominal interventions 2010,		5
79	Model-driven physiological assessment of the mitral valve from 4D TEE <b>2009</b> ,		5
78	Shape-based diagnosis of the aortic valve <b>2009</b> ,		5
77	Coronary DSA: enhancing coronary tree visibility through discriminative learning and robust motion estimation <b>2009</b> ,		5
76	User-constrained guidewire localization in fluoroscopy 2009,		5
75	Select, Attend, and Transfer: Light, Learnable Skip Connections. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 417-425	0.9	5

74	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
73	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
72	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
71	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
70	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
69	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
68	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
67	Fast tracking of catheters in 2D fluoroscopic images using an integrated CPU-GPU framework <b>2012</b> ,		4
66	Detection and retrieval of cysts in joint ultrasound B-mode and elasticity breast images 2010,		4
65	Robust motion estimation using trajectory spectrum learning: Application to aortic and mitral valve modeling from 4D TEE <b>2009</b> ,		4
64	Automatic left ventricle detection in MRI images using marginal space learning and component-based voting <b>2009</b> ,		4
63	Personalized learning-based segmentation of thoracic aorta and main branches for diagnosis and treatment planning <b>2012</b> ,		4
62	Marginal Space Learning <b>2014</b> , 25-65		4
61	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
60	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
59	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
58	Data-Driven Reduction of a Cardiac Myofilament Model. Lecture Notes in Computer Science, 2013, 232-	<b>240</b> .9	4
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## (2010-2014)

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55	Graph based interactive detection of curve structures in 2D fluoroscopy. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 269-77	0.9	4
54	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
53	Example Based Non-rigid Shape Detection. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 423-436	0.9	4
52	Automatic image-to-model framework for patient-specific electromechanical modeling of the heart <b>2014</b> ,		3
51	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
50	Aortic valve and ascending aortic root modeling from 3D and 3D+t CT <b>2010</b> ,		3
49	Left ventricle endocardium segmentation for cardiac CT volumes using an optimal smooth surface <b>2009</b> ,		3
48	Hierarchical guidewire tracking in fluoroscopic sequences 2009,		3
47	Vascular landmark detection in 3D CT data <b>2011</b> ,		3
47	Vascular landmark detection in 3D CT data 2011,  AutoMPR: Automatic detection of standard planes in 3D echocardiography 2008,		3
46	AutoMPR: Automatic detection of standard planes in 3D echocardiography <b>2008</b> ,  3D ultrasound tracking of the left ventricle using one-step forward prediction and data fusion of	0.9	3
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32	Dissimilarity computation through low rank corrections. <i>Pattern Recognition Letters</i> , <b>2003</b> , 24, 227-236	4.7	2
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30	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
29	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
28	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
27	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
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25	Challenges to Validate Multi-Physics Model of Liver Tumor Radiofrequency Ablation from Pre-clinical Data <b>2016</b> , 27-38		1
24	Advanced intervention planning for Transcatheter Aortic Valve Implantations (TAVI) from CT using volumetric models <b>2013</b> ,		1
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18	Vito IA 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
17	Computational Decision Support for Percutaneous Aortic Valve Implantation. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 247-256	0.9	1
16	Computational Fluid Dynamics Framework for Large-Scale Simulation in Pediatric Cardiology <b>2012</b> , 97-1	106	1
15	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
14	Nonrigid Object Segmentation: Application to Four-Chamber Heart Segmentation <b>2014</b> , 159-198		
13	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	
12	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	
11	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	
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9	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	
8	Comparison of Marginal Space Learning and Full Space Learning in 2D <b>2014</b> , 67-78		
7	Part-Based Object Detection and Segmentation <b>2014</b> , 103-135		
6	Constrained Marginal Space Learning <b>2014</b> , 79-101		
5	Applications of Marginal Space Learning in Medical Imaging <b>2014</b> , 199-256		
4	Optimal Mean Shape for Nonrigid Object Detection and Segmentation <b>2014</b> , 137-158		
3	Learning cardiac anatomy <b>2020</b> , 97-116		

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