

# Maxime Sermesant

## List of Publications by Year in descending order

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221  
papers

7,411  
citations

50170

46  
h-index

64668

79  
g-index

234  
all docs

234  
docs citations

234  
times ranked

5923  
citing authors

#	ARTICLE	IF	CITATIONS
1	CA-533-01 MULTIMODALITY PLANNING OF STEREOTACTIC RADIO-ABLATION FOR VENTRICULAR TACHYCARDIA: RESULTS FROM THE INTERNATIONAL MUSIC CONSORTIUM. <i>Heart Rhythm</i> , 2022, 19, S57-S58.	0.3	0
2	Meshless Electrophysiological Modeling of Cardiac Resynchronization Therapyâ€™ Benchmark Analysis with Finite-Element Methods in Experimental Data. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6438.	1.3	3
3	MUSIC: Cardiac Imaging, Modelling and Visualisation Software for Diagnosis and Therapy. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6145.	1.3	2
4	Cardiac segmentation on late gadolinium enhancement MRI: A benchmark study from multi-sequence cardiac MR segmentation challenge. <i>Medical Image Analysis</i> , 2022, 81, 102528.	7.0	22
5	Three-dimensional right ventricular shape and strain in congenital heart disease patients with right ventricular chronic volume loading. <i>European Heart Journal Cardiovascular Imaging</i> , 2021, 22, 1174-1181.	0.5	23
6	Direction-Dependent Decomposition of Three-Dimensional Right Ventricular Motion: Beware of Approximations. <i>Journal of the American Society of Echocardiography</i> , 2021, 34, 201-203.	1.2	2
7	A global benchmark of algorithms for segmenting the left atrium from late gadolinium-enhanced cardiac magnetic resonance imaging. <i>Medical Image Analysis</i> , 2021, 67, 101832.	7.0	150
8	Estimation of Imaging Biomarkerâ€™s Progression in Post-infarct Patients Using Cross-sectional Data. <i>Lecture Notes in Computer Science</i> , 2021, , 108-116.	1.0	0
9	Shape Constraints in Deep Learning for Robust 2D Echocardiography Analysis. <i>Lecture Notes in Computer Science</i> , 2021, , 22-34.	1.0	3
10	EP-Net 2.0: Out-of-Domain Generalisation for Deep Learning Models of Cardiac Electrophysiology. <i>Lecture Notes in Computer Science</i> , 2021, , 482-492.	1.0	5
11	Scar-Related Ventricular Arrhythmia Prediction from Imaging Using Explainable Deep Learning. <i>Lecture Notes in Computer Science</i> , 2021, , 461-470.	1.0	3
12	Personal-by-Design: A 3D Electromechanical Model of the Heart Tailored for Personalisation. <i>Lecture Notes in Computer Science</i> , 2021, , 447-457.	1.0	1
13	3D MRI of explanted sheep hearts with submillimeter isotropic spatial resolution: comparison between diffusion tensor and structure tensor imaging. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2021, 34, 741-755.	1.1	11
14	Applications of artificial intelligence in cardiovascular imaging. <i>Nature Reviews Cardiology</i> , 2021, 18, 600-609.	6.1	74
15	Deep learning formulation of electrocardiographic imaging integrating image and signal information with data-driven regularization. <i>Europace</i> , 2021, 23, i55-i62.	0.7	9
16	Cardiac Motion Modeling With Parallel Transport And Shape Splines. , 2021, , .		3
17	Biophysics-based statistical learning: Application to heart and brain interactions. <i>Medical Image Analysis</i> , 2021, 72, 102089.	7.0	5
18	Automatic Multiplanar CT Reformatting from Trans-Axial into Left Ventricle Short-Axis View. <i>Lecture Notes in Computer Science</i> , 2021, , 14-22.	1.0	3

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19	Value of 3D right ventricular function over 2D assessment in acute pulmonary embolism. Echocardiography, 2021, 38, 1694-1701.	0.3	2
20	Left atrial shape is independent predictor of arrhythmia recurrence after catheter ablation for atrial fibrillation: A shape statistics study. Heart Rhythm O2, 2021, 2, 622-632.	0.6	8
21	Novel atlas of fiber directions built from ex-vivo diffusion tensor images of porcine hearts. Computer Methods and Programs in Biomedicine, 2020, 187, 105200.	2.6	9
22	Calibration of a fully coupled electromechanical meshless computational model of the heart with experimental data. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112869.	3.4	6
23	Towards Hyper-Reduction of Cardiac Models Using Poly-affine Transformations. Lecture Notes in Computer Science, 2020, , 100-108.	1.0	1
24	Non-invasive Pressure Estimation in Patients with Pulmonary Arterial Hypertension: Data-Driven or Model-Based?. Lecture Notes in Computer Science, 2020, , 147-156.	1.0	0
25	End-to-end Cardiac Ultrasound Simulation for a Better Understanding of Image Quality. Lecture Notes in Computer Science, 2020, , 167-175.	1.0	0
26	Joint Data Imputation and Mechanistic Modelling for Simulating Heart-Brain Interactions in Incomplete Datasets. Lecture Notes in Computer Science, 2020, , 478-486.	1.0	0
27	Transfer Learning From Simulations on a Reference Anatomy for ECGI in Personalized Cardiac Resynchronization Therapy. IEEE Transactions on Biomedical Engineering, 2019, 66, 343-353.	2.5	29
28	Are wall thickness channels defined by computed tomography predictive of isthmuses of postinfarction ventricular tachycardia?. Heart Rhythm, 2019, 16, 1661-1668.	0.3	47
29	Large Scale Cardiovascular Model Personalisation for Mechanistic Analysis of Heart and Brain Interactions. Lecture Notes in Computer Science, 2019, , 285-293.	1.0	3
30	Breaking the state of the heart: meshless model for cardiac mechanics. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1549-1561.	1.4	22
31	Automatically Segmenting the Left Atrium from Cardiac Images Using Successive 3D U-Nets and a Contour Loss. Lecture Notes in Computer Science, 2019, , 221-229.	1.0	22
32	A rule-based method to model myocardial fiber orientation in cardiac biventricular geometries with outflow tracts. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3185.	1.0	78
33	Population-based priors in cardiac model personalisation for consistent parameter estimation in heterogeneous databases. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3158.	1.0	10
34	Model-Based Feature Augmentation for Cardiac Ablation Target Learning From Images. IEEE Transactions on Biomedical Engineering, 2019, 66, 30-40.	2.5	20
35	Deep Learning Formulation of ECGI for Data-Driven Integration of Spatiotemporal Correlations and Imaging Information. Lecture Notes in Computer Science, 2019, , 20-28.	1.0	9
36	Fully Automated Electrophysiological Model Personalisation Framework from CT Imaging. Lecture Notes in Computer Science, 2019, , 325-333.	1.0	4

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37	EP-Net: Learning Cardiac Electrophysiology Models for Physiology-Based Constraints in Data-Driven Predictions. Lecture Notes in Computer Science, 2019, , 55-63.	1.0	4
38	Symmetric Algorithmic Components for Shape Analysis with Diffeomorphisms. Lecture Notes in Computer Science, 2019, , 759-768.	1.0	3
39	Constructing an average geometry and diffusion tensor magnetic resonance field from freshly explanted porcine hearts. , 2019, , .		1
40	Pipeline to Build and Test Robust 3D T1 Mapping-Based Heart Models for EP Interventions: Preliminary Results. Lecture Notes in Computer Science, 2019, , 64-72.	1.0	1
41	Multifidelity-CMA: a multifidelity approach for efficient personalisation of 3D cardiac electromechanical models. Biomechanics and Modeling in Mechanobiology, 2018, 17, 285-300.	1.4	16
42	Novel T1 Mapping-Based Preclinical Models for Cardiac Electrophysiology: A Combined Experimental and Theoretical Study. Biophysical Journal, 2018, 114, 472a.	0.2	0
43	Realistic Vendor-Specific Synthetic Ultrasound Data for Quality Assurance of 2-D Speckle Tracking Echocardiography: Simulation Pipeline and Open Access Database. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 411-422.	1.7	33
44	Correlation between computer tomographyâ€derived scar topography and critical ablation sites in postinfarction ventricular tachycardia. Journal of Cardiovascular Electrophysiology, 2018, 29, 438-445.	0.8	52
45	Low-dimensional representation of cardiac motion using Barycentric Subspaces: A new group-wise paradigm for estimation, analysis, and reconstruction. Medical Image Analysis, 2018, 45, 1-12.	7.0	11
46	Cardiac Motion Evolution Model for Analysis of Functional Changes Using Tensor Decomposition and Cross-Sectional Data. IEEE Transactions on Biomedical Engineering, 2018, 65, 2769-2780.	2.5	4
47	Statistical Shape Modeling of the Left Ventricle: Myocardial Infarct Classification Challenge. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 503-515.	3.9	61
48	Model-Based Generation of Large Databases of Cardiac Images: Synthesis of Pathological Cine MR Sequences From Real Healthy Cases. IEEE Transactions on Medical Imaging, 2018, 37, 755-766.	5.4	34
49	Three-dimensional right-ventricular regional deformation and survival in pulmonary hypertension. European Heart Journal Cardiovascular Imaging, 2018, 19, 450-458.	0.5	62
50	A Framework for the Generation of Realistic Synthetic Cardiac Ultrasound and Magnetic Resonance Imaging Sequences From the Same Virtual Patients. IEEE Transactions on Medical Imaging, 2018, 37, 741-754.	5.4	31
51	Estimation of the Spatial Resolution of a 2D Strain Estimator Using Synthetic Cardiac Images. , 2018, , .		2
52	Fast personalized electrophysiological models from computed tomography images for ventricular tachycardia ablation planning. Europace, 2018, 20, iii94-iii101.	0.7	35
53	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. IEEE Transactions on Medical Imaging, 2018, 37, 2514-2525.	5.4	926
54	Right Ventricular Function Evolution With Pregnancy in Repaired Tetralogy of Fallot. Canadian Journal of Cardiology, 2018, 34, 1369.e9-1369.e11.	0.8	3

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55	Algorithms for left atrial wall segmentation and thickness “ Evaluation on an open-source CT and MRI image database. <i>Medical Image Analysis</i> , 2018, 50, 36-53.	7.0	40
56	Parallel Transport of Surface Deformations from Pole Ladder to Symmetrical Extension. <i>Lecture Notes in Computer Science</i> , 2018, , 116-124.	1.0	3
57	Automatic Multi-Atlas Segmentation of Myocardium with SVF-Net. <i>Lecture Notes in Computer Science</i> , 2018, , 170-177.	1.0	11
58	Multilevel Non-parametric Groupwise Registration in Cardiac MRI: Application to Explanted Porcine Hearts. <i>Lecture Notes in Computer Science</i> , 2018, , 60-69.	1.0	2
59	Image-Based Biophysical Simulation of Intracardiac Abnormal Ventricular Electrograms. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 1446-1454.	2.5	13
60	Myocardial wall thinning predicts transmural substrate in patients with scar-related ventricular tachycardia. <i>Heart Rhythm</i> , 2017, 14, 155-163.	0.3	42
61	Detecting Clinically Meaningful Shape Clusters in Medical Image Data: Metrics Analysis for Hierarchical Clustering Applied to Healthy and Pathological Aortic Arches. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 2373-2383.	2.5	62
62	Noninvasive Personalization of a Cardiac Electrophysiology Model From Body Surface Potential Mapping. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 2206-2218.	2.5	61
63	Looks Do Matter! Aortic Arch Shape After Hypoplastic Left Heart Syndrome Palliation Correlates With Cavopulmonary Outcomes. <i>Annals of Thoracic Surgery</i> , 2017, 103, 645-654.	0.7	26
64	Interactive training system for interventional electrophysiology procedures. <i>Medical Image Analysis</i> , 2017, 35, 225-237.	7.0	18
65	How successful is successful? Aortic arch shape after successful aortic coarctation repair correlates with left ventricular function. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2017, 153, 418-427.	0.4	61
66	ECG imaging of ventricular tachycardia: evaluation against simultaneous non-contact mapping and CMR-derived grey zone. <i>Medical and Biological Engineering and Computing</i> , 2017, 55, 979-990.	1.6	7
67	Cardiac Imaging in Patients With Ventricular Tachycardia. <i>Circulation</i> , 2017, 136, 2491-2507.	1.6	70
68	Estimation of Purkinje Activation from ECG: An Intermittent Left Bundle Branch Block Study. <i>Lecture Notes in Computer Science</i> , 2017, , 135-142.	1.0	3
69	Novel Framework to Integrate Real-Time MR-Guided EP Data with T1 Mapping-Based Computational Heart Models. <i>Lecture Notes in Computer Science</i> , 2017, , 11-20.	1.0	1
70	Sparse Bayesian Non-linear Regression for Multiple Onsets Estimation in Non-invasive Cardiac Electrophysiology. <i>Lecture Notes in Computer Science</i> , 2017, , 230-238.	1.0	5
71	VT Scan: Towards an Efficient Pipeline from Computed Tomography Images to Ventricular Tachycardia Ablation. <i>Lecture Notes in Computer Science</i> , 2017, , 271-279.	1.0	2
72	Prediction of Post-Ablation Outcome in Atrial Fibrillation Using Shape Parameterization and Partial Least Squares Regression. <i>Lecture Notes in Computer Science</i> , 2017, , 311-321.	1.0	1

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73	Smoothed Particle Hydrodynamics for Electrophysiological Modeling: An Alternative to Finite Element Methods. Lecture Notes in Computer Science, 2017, , 333-343.	1.0	7
74	SVF-Net: Learning Deformable Image Registration Using Shape Matching. Lecture Notes in Computer Science, 2017, , 266-274.	1.0	153
75	Longitudinal Parameter Estimation in 3D Electromechanical Models: Application to Cardiovascular Changes in Digestion. Lecture Notes in Computer Science, 2017, , 432-440.	1.0	0
76	Phase-Based Registration of Cardiac Tagged MR Images by Incorporating Anatomical Constraints. Lecture Notes in Computer Science, 2017, , 39-47.	1.0	0
77	Improving Understanding of Long-Term Cardiac Functional Remodelling via Cross-Sectional Analysis of Polyaffine Motion Parameters. Lecture Notes in Computer Science, 2017, , 51-59.	1.0	1
78	STACOM-SLAWT Challenge: Left Atrial Wall Segmentation and Thickness Measurement Using Region Growing and Marker-Controlled Geodesic Active Contour. Lecture Notes in Computer Science, 2017, , 211-219.	1.0	1
79	Cardiac computational modeling of ventricular tachycardia and cardiac resynchronization therapy: a clinical perspective. Minerva Cardiology and Angiology, 2017, 65, 380-397.	0.4	2
80	Biophysical Modeling Predicts Ventricular Tachycardia Inducibility and Circuit Morphology: A Combined Clinical Validation and Computer Modeling Approach. Journal of Cardiovascular Electrophysiology, 2016, 27, 851-860.	0.8	31
81	Highly reduced model of the cardiac function for fast simulation. , 2016, , .		1
82	Multiphysics and multiscale modelling, data-model fusion and integration of organ physiology in the clinic: ventricular cardiac mechanics. Interface Focus, 2016, 6, 20150083.	1.5	165
83	Infarct Localization From Myocardial Deformation: Prediction and Uncertainty Quantification by Regression From a Low-Dimensional Space. IEEE Transactions on Medical Imaging, 2016, 35, 2340-2352.	5.4	28
84	Impact of New Technologies and Approaches for Post-Myocardial Infarction Ventricular Tachycardia Ablation During Long-Term Follow-Up. Circulation: Arrhythmia and Electrophysiology, 2016, 9, .	2.1	75
85	Image Integration to Guide Catheter Ablation in Scar-Related Ventricular Tachycardia. Journal of Cardiovascular Electrophysiology, 2016, 27, 699-708.	0.8	106
86	Generation of Realistic 4D Synthetic CSPAMM Tagged MR Sequences for Benchmarking Cardiac Motion Tracking Algorithms. Lecture Notes in Computer Science, 2016, , 108-117.	1.0	1
87	A statistical shape modelling framework to extract 3D shape biomarkers from medical imaging data: assessing arch morphology of repaired coarctation of the aorta. BMC Medical Imaging, 2016, 16, 40.	1.4	65
88	CMR-based 3D statistical shape modelling reveals left ventricular morphological differences between healthy controls and arterial switch operation survivors. Journal of Cardiovascular Magnetic Resonance, 2016, 18, Q2.	1.6	5
89	Detailed Evaluation of Five 3D Speckle Tracking Algorithms Using Synthetic Echocardiographic Recordings. IEEE Transactions on Medical Imaging, 2016, 35, 1915-1926.	5.4	40
90	Combination of Polyaffine Transformations and Supervised Learning for the Automatic Diagnosis of LV Infarct. Lecture Notes in Computer Science, 2016, , 190-198.	1.0	7

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91	Barycentric Subspace Analysis: A New Symmetric Group-Wise Paradigm for Cardiac Motion Tracking. Lecture Notes in Computer Science, 2016, , 300-307.	1.0	2
92	A Multiscale Cardiac Model for Fast Personalisation and Exploitation. Lecture Notes in Computer Science, 2016, , 174-182.	1.0	3
93	Prediction of Infarct Localization from Myocardial Deformation. Lecture Notes in Computer Science, 2016, , 51-59.	1.0	3
94	Automated Quantification of Right Ventricular Fat at Contrast-enhanced Cardiac Multidetector CT in Arrhythmogenic Right Ventricular Cardiomyopathy. Radiology, 2015, 275, 683-691.	3.6	20
95	Generation of ultra-realistic synthetic echocardiographic sequences to facilitate standardization of deformation imaging. , 2015, , .		6
96	The role of the image phase in cardiac strain imaging. , 2015, , .		0
97	Velocity-based cardiac contractility personalization from images using derivative-free optimization. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 43, 35-52.	1.5	17
98	A Pipeline for the Generation of Realistic 3D Synthetic Echocardiographic Sequences: Methodology and Open-Access Database. IEEE Transactions on Medical Imaging, 2015, 34, 1436-1451.	5.4	91
99	Spatio-Temporal Tensor Decomposition of a Polyaffine Motion Model for a Better Analysis of Pathological Left Ventricular Dynamics. IEEE Transactions on Medical Imaging, 2015, 34, 1562-1575.	5.4	31
100	Local late gadolinium enhancement features to identify the electrophysiological substrate of post-infarction ventricular tachycardia: a machine learning approach. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P234.	1.6	0
101	Propagation of Myocardial Fibre Architecture Uncertainty on Electromechanical Model Parameter Estimation: A Case Study. Lecture Notes in Computer Science, 2015, , 448-456.	1.0	5
102	Descriptive and Intuitive Population-Based Cardiac Motion Analysis via Sparsity Constrained Tensor Decomposition. Lecture Notes in Computer Science, 2015, , 419-426.	1.0	3
103	Evaluation of Personalised Canine Electromechanical Models. Lecture Notes in Computer Science, 2015, , 74-82.	1.0	0
104	Elastic registration vs. block matching for quantification of cardiac function with 3D ultrasound: Initial results of a direct comparison in silico based on a new evaluation pipeline. , 2014, , .		3
105	Relationship Between MDCTâ€Imaged Myocardial Fat and Ventricular Tachycardia Substrate in Arrhythmogenic Right Ventricular Cardiomyopathy. Journal of the American Heart Association, 2014, 3, .	1.6	26
106	Group-wise construction of reduced models for understanding and characterization of pulmonary blood flows from medical images. Medical Image Analysis, 2014, 18, 63-82.	7.0	27
107	Cardiac Arrhythmias: Multimodal Assessment Integrating Body Surface ECG Mapping into Cardiac Imaging. Radiology, 2014, 271, 239-247.	3.6	54
108	Cardiac Electrophysiological Activation Pattern Estimation From Images Using a Patient-Specific Database of Synthetic Image Sequences. IEEE Transactions on Biomedical Engineering, 2014, 61, 235-245.	2.5	19

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109	Improved Myocardial Motion Estimation Combining Tissue Doppler and B-Mode Echocardiographic Images. IEEE Transactions on Medical Imaging, 2014, 33, 2098-2106.	5.4	5
110	Progress on Customization of Predictive MRI-Based Macroscopic Models from Experimental Data. Lecture Notes in Computer Science, 2014, , 152-161.	1.0	1
111	Interactive Training System for Interventional Electrophysiology Procedures. Lecture Notes in Computer Science, 2014, , 11-19.	1.0	5
112	Velocity-Based Cardiac Contractility Personalization with Derivative-Free Optimization. Lecture Notes in Computer Science, 2014, , 228-235.	1.0	0
113	Confidence-Based Training for Clinical Data Uncertainty in Image-Based Prediction of Cardiac Ablation Targets. Lecture Notes in Computer Science, 2014, , 148-159.	1.0	2
114	Generation of Synthetic but Visually Realistic Time Series of Cardiac Images Combining a Biophysical Model and Clinical Images. IEEE Transactions on Medical Imaging, 2013, 32, 99-109.	5.4	38
115	Understanding the mechanisms amenable to CRT response: from pre-operative multimodal image data to patient-specific computational models. Medical and Biological Engineering and Computing, 2013, 51, 1235-1250.	1.6	30
116	3D Strain Assessment in Ultrasound (Straus): A Synthetic Comparison of Five Tracking Methodologies. IEEE Transactions on Medical Imaging, 2013, 32, 1632-1646.	5.4	54
117	Simultaneous non-contact mapping fused with CMR derived grey zone to explore the relationship with ventricular tachycardia substrate in ischaemic cardiomyopathy. Journal of Cardiovascular Magnetic Resonance, 2013, 15, .	1.6	2
118	Towards an interactive electromechanical model of the heart. Interface Focus, 2013, 3, 20120091.	1.5	24
119	Fast parameter calibration of a cardiac electromechanical model from medical images based on the unscented transform. Biomechanics and Modeling in Mechanobiology, 2013, 12, 815-831.	1.4	47
120	Personalization of a cardiac electromechanical model using reduced order unscented Kalman filtering from regional volumes. Medical Image Analysis, 2013, 17, 816-829.	7.0	58
121	Spatial correlation of action potential duration and diastolic dysfunction in transgenic and drug-induced LQT2 rabbits. Heart Rhythm, 2013, 10, 1533-1541.	0.3	41
122	Benchmarking framework for myocardial tracking and deformation algorithms: An open access database. Medical Image Analysis, 2013, 17, 632-648.	7.0	140
123	In vivo human cardiac fibre architecture estimation using shape-based diffusion tensor processing. Medical Image Analysis, 2013, 17, 1243-1255.	7.0	101
124	Inverse Relationship Between Fractionated Electrograms and Atrial Fibrosis in Persistent Atrial Fibrillation. Journal of the American College of Cardiology, 2013, 62, 802-812.	1.2	205
125	Preliminary specificity study of the Bestelment Sorine electromechanical model of the heart using parameter calibration from medical images. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 259-271.	1.5	30
126	Computational modelling of the right ventricle in repaired tetralogy of Fallot: can it provide insight into patient treatment?. European Heart Journal Cardiovascular Imaging, 2013, 14, 381-386.	0.5	30



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127	Regional Myocardial Wall Thinning at Multidetector Computed Tomography Correlates to Arrhythmogenic Substrate in Postinfarction Ventricular Tachycardia. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2013, 6, 342-350.	2.1	108
128	Fast myocardial motion and strain estimation in 3D cardiac ultrasound with Sparse Demons. , 2013, , .		19
129	Integration of Merged Delayed-Enhanced Magnetic Resonance Imaging and Multidetector Computed Tomography for the Guidance of Ventricular Tachycardia Ablation: A Pilot Study. <i>Journal of Cardiovascular Electrophysiology</i> , 2013, 24, 419-426.	0.8	95
130	Statistical Shape Analysis of Surfaces in Medical Images Applied to the Tetralogy of Fallot Heart. , 2013, , 165-191.		3
131	Computational and Physical Phantom Setups for the Second Cardiac Motion Analysis Challenge (cMAC2). <i>Lecture Notes in Computer Science</i> , 2013, , 125-133.	1.0	4
132	Regional Analysis of Left Ventricle Function Using a Cardiac-Specific Polyaffine Motion Model. <i>Lecture Notes in Computer Science</i> , 2013, , 483-490.	1.0	8
133	Spatio-temporal Dimension Reduction of Cardiac Motion for Group-Wise Analysis and Statistical Testing. <i>Lecture Notes in Computer Science</i> , 2013, 16, 501-508.	1.0	5
134	A Near-Incompressible Poly-affine Motion Model for Cardiac Function Analysis. <i>Lecture Notes in Computer Science</i> , 2013, , 288-297.	1.0	3
135	In vivo Contact EP Data and ex vivo MR-Based Computer Models: Registration and Model-Dependent Errors. <i>Lecture Notes in Computer Science</i> , 2013, , 364-374.	1.0	2
136	Integration of different cardiac electrophysiological models into a single simulation pipeline. , 2012, , .		0
137	Clinical applications of image fusion for electrophysiology procedures. , 2012, , .		5
138	Statistical Atlases and Computational Models of the Heart. <i>Imaging and Modelling Challenges. Lecture Notes in Computer Science</i> , 2012, , .	1.0	3
139	Relationship between endocardial activation sequences defined by high-density mapping to early septal contraction (septal flash) in patients with left bundle branch block undergoing cardiac resynchronization therapy. <i>Europace</i> , 2012, 14, 99-106.	0.7	61
140	Patient-specific electromechanical models of the heart for the prediction of pacing acute effects in CRT: A preliminary clinical validation. <i>Medical Image Analysis</i> , 2012, 16, 201-215.	7.0	186
141	Construction of 3D MR image-based computer models of pathologic hearts, augmented with histology and optical fluorescence imaging to characterize action potential propagation. <i>Medical Image Analysis</i> , 2012, 16, 505-523.	7.0	26
142	Personalization of Cardiac Motion and Contractility From Images Using Variational Data Assimilation. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 20-24.	2.5	44
143	An Incompressible Log-Domain Demons Algorithm for Tracking Heart Tissue. <i>Lecture Notes in Computer Science</i> , 2012, , 55-67.	1.0	13
144	Strain-Based Regional Nonlinear Cardiac Material Properties Estimation from Medical Images. <i>Lecture Notes in Computer Science</i> , 2012, 15, 617-624.	1.0	6

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145	Cardiac Mechanical Parameter Calibration Based on the Unscented Transform. Lecture Notes in Computer Science, 2012, 15, 41-48.	1.0	5
146	Personalisation of a 3D Ventricular Electrophysiological Model, Using Endocardial and Epicardial Contact Mapping and MRI. Lecture Notes in Computer Science, 2012, , 14-22.	1.0	1
147	EP Challenge - STACOM™11: Forward Approaches to Computational Electrophysiology Using MRI-Based Models and In-Vivo CARTO Mapping in Swine Hearts. Lecture Notes in Computer Science, 2012, , 1-13.	1.0	1
148	Correspondence Between Simple 3-D MRI-Based Computer Models and In-Vivo EP Measurements in Swine With Chronic Infarctions. IEEE Transactions on Biomedical Engineering, 2011, 58, 3483-3486.	2.5	30
149	Personalization of a Cardiac Electrophysiology Model Using Optical Mapping and MRI for Prediction of Changes With Pacing. IEEE Transactions on Biomedical Engineering, 2011, 58, 3339-3349.	2.5	28
150	Coupled personalization of cardiac electrophysiology models for prediction of ischaemic ventricular tachycardia. Interface Focus, 2011, 1, 396-407.	1.5	101
151	Efficient probabilistic model personalization integrating uncertainty on data and parameters: Application to Eikonal-Diffusion models in cardiac electrophysiology. Progress in Biophysics and Molecular Biology, 2011, 107, 134-146.	1.4	78
152	Inter-model consistency and complementarity: Learning from ex-vivo imaging and electrophysiological data towards an integrated understanding of cardiac physiology. Progress in Biophysics and Molecular Biology, 2011, 107, 122-133.	1.4	35
153	A Statistical Model for Quantification and Prediction of Cardiac Remodelling: Application to Tetralogy of Fallot. IEEE Transactions on Medical Imaging, 2011, 30, 1605-1616.	5.4	70
154	iLogDemons: A Demons-Based Registration Algorithm for Tracking Incompressible Elastic Biological Tissues. International Journal of Computer Vision, 2011, 92, 92-111.	10.9	147
155	Modeling and Registration for Electrophysiology Procedures Based on Three-Dimensional Imaging. Current Cardiovascular Imaging Reports, 2011, 4, 116-126.	0.4	10
156	A multi-front eikonal model of cardiac electrophysiology for interactive simulation of radio-frequency ablation. Computers and Graphics, 2011, 35, 431-440.	1.4	29
157	euHeart: personalized and integrated cardiac care using patient-specific cardiovascular modelling. Interface Focus, 2011, 1, 349-364.	1.5	112
158	89 Electromechanical interaction in patients undergoing cardiac resynchronisation therapy: comparison of intracardiac activation maps and early septal contraction in left bundle branch block. Heart, 2011, 97, A52-A52.	1.2	0
159	Synthetic Echocardiographic Image Sequences for Cardiac Inverse Electro-Kinematic Learning. Lecture Notes in Computer Science, 2011, 14, 500-507.	1.0	2
160	Le cœur numérique personnalisé. Bulletin De L'Academie Nationale De Medecine, 2011, 195, 1855-1867.	0.0	2
161	Registration of 4D Cardiac CT Sequences Under Trajectory Constraints With Multichannel Diffeomorphic Demons. IEEE Transactions on Medical Imaging, 2010, 29, 1351-1368.	5.4	73
162	In vivo Human 3D Cardiac Fibre Architecture: Reconstruction Using Curvilinear Interpolation of Diffusion Tensor Images. Lecture Notes in Computer Science, 2010, 13, 418-425.	1.0	48

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