Frederik Maes

List of Publications by Year in Descending Order

232 papers	**11,800** citations	**48** h-index	**106** g-index
253 ext. papers	**13,487** ext. citations	**4.9** avg, IF	**5.85** L-index

#	Paper	IF	Citations
232	Artificial Intelligence Based Patient-Specific Preoperative Planning Algorithm for Total Knee Arthroplasty.. *Frontiers in Robotics and AI*, **2022**, 9, 840282	2.8	1
231	Treatment plan prediction for lung IMRT using deep learning based fluence map generation. *Physica Medica*, **2022**, 99, 44-54	2.7	0
230	Learning from Mistakes: An Error-Driven Mechanism to Improve Segmentation Performance Based on Expert Feedback. *Lecture Notes in Computer Science*, **2021**, 68-77	0.9	
229	Ga-PSMA-11 PET, F-PSMA-1007 PET, and MRI for Gross Tumor Volume Delineation in Primary Prostate Cancer: Intermodality and Intertracer Variability. *Practical Radiation Oncology*, **2021**, 11, 202-211	2.8	1
228	Artificial intelligence and its impact on quality improvement in upper and lower gastrointestinal endoscopy. *Digestive Endoscopy*, **2021**, 33, 242-253	3.7	7
227	Real-time unblinding for validation of a new CADe tool for colorectal polyp detection. *Gut*, **2021**, 70, 641-643	19.2	2
226	Optimal Ga-PSMA and F-PSMA PET window levelling for gross tumour volume delineation in primary prostate cancer. *European Journal of Nuclear Medicine and Molecular Imaging*, **2021**, 48, 1211-1218	8.8	11
225	Pitfalls in training and validation of deep learning systems. *Baillieres Best Practice and Research in Clinical Gastroenterology*, **2021**, 52-53, 101712	2.5	2
224	Resorption of retromolar bone grafts after alveolar ridge augmentation-volumetric changes after 12 months assessed by CBCT analysis. *International Journal of Implant Dentistry*, **2021**, 7, 7	2.8	2
223	Convolutional LSTM **2021**, 121-126		
222	icobrain ms 5.1: Combining unsupervised and supervised approaches for improving the detection of multiple sclerosis lesions. *NeuroImage: Clinical*, **2021**, 31, 102707	5.3	1
221	Shape Constrained CNN for Cardiac MR Segmentation with Simultaneous Prediction of Shape and Pose Parameters. *Lecture Notes in Computer Science*, **2021**, 127-136	0.9	4
220	On the Relationship Between Calibrated Predictors and Unbiased Volume Estimation. *Lecture Notes in Computer Science*, **2021**, 678-688	0.9	2
219	Deep learning for elective neck delineation: More consistent and time efficient. *Radiotherapy and Oncology*, **2020**, 153, 180-188	5.3	2
218	Sa2012 AUTOMATED POLYP SIZE ESTIMATION WITH DEEP LEARNING REDUCES INTEROBSERVER VARIABILITY. *Gastrointestinal Endoscopy*, **2020**, 91, AB241-AB242	5.2	2
217	Optimization for Medical Image Segmentation: Theory and Practice When Evaluating With Dice Score or Jaccard Index. *IEEE Transactions on Medical Imaging*, **2020**, 39, 3679-3690	11.7	57
216	Lipid availability determines fate of skeletal progenitor cells via SOX9. *Nature*, **2020**, 579, 111-117	50.4	53

#	Publication	IF	Cit.
215	3D Left Ventricular Segmentation from 2D Cardiac MR Images Using Spatial Context. *Lecture Notes in Computer Science*, **2020**, 90-99	0.9	
214	Left Ventricular Parameter Regression from Deep Feature Maps of a Jointly Trained Segmentation CNN. *Lecture Notes in Computer Science*, **2020**, 395-404	0.9	2
213	Segmentation of head-and-neck organs-at-risk in longitudinal CT scans combining deformable registrations and convolutional neural networks. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, **2020**, 8, 519-528	0.9	4
212	Tu1931 INCORPORATION OF TEMPORAL INFORMATION IN A DEEP NEURAL NETWORK IMPROVES PERFORMANCE LEVEL FOR AUTOMATED POLYP DETECTION AND DELINEATION. *Gastrointestinal Endoscopy*, **2019**, 89, AB618-AB619	5.2	3
211	Optimized preoperative motor cortex mapping in brain tumors using advanced processing of transcranial magnetic stimulation data. *NeuroImage: Clinical*, **2019**, 21, 101657	5.3	7
210	The Role of Medical Image Computing and Machine Learning in Healthcare **2019**, 9-23		5
209	Benefits of deep learning for delineation of organs at risk in head and neck cancer. *Radiotherapy and Oncology*, **2019**, 138, 68-74	5.3	39
208	Tu1959 BLI AND LCI IMPROVE POLYP DETECTION AND DELINEATION ACCURACY FOR DEEP LEARNING NETWORKS. *Gastrointestinal Endoscopy*, **2019**, 89, AB632	5.2	2
207	Optimizing the Dice Score and Jaccard Index for Medical Image Segmentation: Theory and Practice. *Lecture Notes in Computer Science*, **2019**, 92-100	0.9	44
206	Feasibility of CT-Only 3D Dose Prediction for VMAT Prostate Plans Using Deep Learning. *Lecture Notes in Computer Science*, **2019**, 10-17	0.9	1
205	Robust motion correction for cardiac T1 and ECV mapping using a T1 relaxation model approach. *Medical Image Analysis*, **2019**, 52, 212-227	15.4	8
204	3D Tendon Strain Estimation Using High-frequency Volumetric Ultrasound Images: A Feasibility Study. *Ultrasonic Imaging*, **2018**, 40, 67-83	1.9	6
203	Preprocessing of Heteroscedastic Medical Images. *IEEE Access*, **2018**, 6, 26047-26058	3.5	3
202	Segmentation of Head and Neck Organs-At-Risk in Longitudinal CT Scans Combining Deformable Registrations and Convolutional Neural Networks. *Lecture Notes in Computer Science*, **2018**, 146-154	0.9	
201	Clinical Implementation of DeepVoxNet for Auto-Delineation of Organs at Risk in Head and Neck Cancer Patients in Radiotherapy. *Lecture Notes in Computer Science*, **2018**, 223-232	0.9	7
200	Modeling the dose dependence of the vis-absorption spectrum of EBT3 GafChromic Films. *Medical Physics*, **2017**, 44, 2532-2543	4.4	16
199	Evaluation of tissue displacement and regional strain in the Achilles tendon using quantitative high-frequency ultrasound. *PLoS ONE*, **2017**, 12, e0181364	3.7	23
198	Unsupervised Framework for Consistent Longitudinal MS Lesion Segmentation. *Lecture Notes in Computer Science*, **2017**, 208-219	0.9	3

197	Imaging Ischemic and Reperfusion Injury in Acute Myocardial Infarction: Putting the Pieces Together With CMR. *JACC: Cardiovascular Imaging*, **2017**, 10, 1520-1523	8.4	2
196	Semi-automated brain tumor segmentation on multi-parametric MRI using regularized non-negative matrix factorization. *BMC Medical Imaging*, **2017**, 17, 29	2.9	24
195	Convexity-constrained and nonnegativity-constrained spherical factorization in diffusion-weighted imaging. *NeuroImage*, **2017**, 146, 507-517	7.9	17
194	Multiparametric Non-Negative Matrix Factorization for Longitudinal Variations Detection in White-Matter Fiber Bundles. *IEEE Journal of Biomedical and Health Informatics*, **2017**, 21, 1393-1402	7.2	4
193	ISLES 2015 - A public evaluation benchmark for ischemic stroke lesion segmentation from multispectral MRI. *Medical Image Analysis*, **2017**, 35, 250-269	15.4	248
192	Patch-Based Super-Resolution of MR Spectroscopic Images: Application to Multiple Sclerosis. *Frontiers in Neuroscience*, **2017**, 11, 13	5.1	20
191	The successive projection algorithm as an initialization method for brain tumor segmentation using non-negative matrix factorization. *PLoS ONE*, **2017**, 12, e0180268	3.7	8
190	Robust Model-Based Registration of Cardiac MR Images for T1 and ECV Mapping. *Lecture Notes in Computer Science*, **2017**, 42-50	0.9	
189	Patch based super-resolution of MR spectroscopic images **2016**,		3
188	ISLES Challenge 2015: Automated Model-Based Segmentation of Ischemic Stroke in MR Images. *Lecture Notes in Computer Science*, **2016**, 246-253	0.9	4
187	Multi-phase rotational angiography of the left ventricle to assist ablations: feasibility and accuracy of novel imaging. *European Heart Journal Cardiovascular Imaging*, **2016**, 17, 162-8	4.1	5
186	Classifying Glioblastoma Multiforme Follow-Up Progressive vs. Responsive Forms Using Multi-Parametric MRI Features. *Frontiers in Neuroscience*, **2016**, 10, 615	5.1	12
185	A Voxel-Wise, Cascaded Classification Approach to Ischemic Stroke Lesion Segmentation. *Lecture Notes in Computer Science*, **2016**, 254-265	0.9	2
184	Validation of an Improved Patient-Specific Mold Design for Registration of In-vivo MRI and Histology of the Prostate. *Lecture Notes in Computer Science*, **2016**, 36-43	0.9	5
183	White Matter Fiber-Bundle Analysis Using Non-negative Tensor Factorization. *Lecture Notes in Computer Science*, **2016**, 650-657	0.9	
182	Persistent Impact of In utero Irradiation on Mouse Brain Structure and Function Characterized by MR Imaging and Behavioral Analysis. *Frontiers in Behavioral Neuroscience*, **2016**, 10, 83	3.5	11
181	Two Time Point MS Lesion Segmentation in Brain MRI: An Expectation-Maximization Framework. *Frontiers in Neuroscience*, **2016**, 10, 576	5.1	18
180	An untrained and unsupervised method for MRI brain tumor segmentation **2016**,		1

179	A Semi-Automated Segmentation Framework for MRI Based Brain Tumor Segmentation Using Regularized Nonnegative Matrix Factorization **2016**,		3
178	Image-based in vivo assessment of targeting accuracy of stereotactic brain surgery in experimental rodent models. *Scientific Reports*, **2016**, 6, 38058	4.9	10
177	A spectroscopic study of the chromatic properties of GafChromicEBT3 films. *Medical Physics*, **2016**, 43, 1156-66	4.4	24
176	Potential benefits of dosimetric VMAT tracking verified with 3D film measurements. *Medical Physics*, **2016**, 43, 2162	4.4	4
175	Neovascularization Potential of Blood Outgrowth Endothelial Cells From Patients With Stable Ischemic Heart Failure Is Preserved. *Journal of the American Heart Association*, **2016**, 5, e002288	6	13
174	Simultaneous segmentation and anatomical labeling of the cerebral vasculature. *Medical Image Analysis*, **2016**, 32, 201-15	15.4	21
173	Comparison of unsupervised classification methods for brain tumor segmentation using multi-parametric MRI. *NeuroImage: Clinical*, **2016**, 12, 753-764	5.3	48
172	Impaired recognition of body expressions in the behavioral variant of frontotemporal dementia. *Neuropsychologia*, **2015**, 75, 496-504	3.2	34
171	Online adaptation and verification of VMAT. *Medical Physics*, **2015**, 42, 3877-91	4.4	10
170	3D volumetric displacement and strain analysis of composite polymerization. *Dental Materials*, **2015**, 31, 453-61	5.7	24
169	Endothelial Msx1 transduces hemodynamic changes into an arteriogenic remodeling response. *Journal of Cell Biology*, **2015**, 210, 1239-56	7.3	11
168	Global tractography of multi-shell diffusion-weighted imaging data using a multi-tissue model. *NeuroImage*, **2015**, 123, 89-101	7.9	94
167	Perfusion Paths: Inference of Voxelwise Blood Flow Trajectories in CT Perfusion. *Lecture Notes in Computer Science*, **2015**, 407-414	0.9	1
166	Automatic segmentation and volumetry of multiple sclerosis brain lesions from MR images. *NeuroImage: Clinical*, **2015**, 8, 367-75	5.3	149
165	Left ventricular four-dimensional rotational angiography with low radiation dose through interphase registration. *Europace*, **2015**, 17, 152-9	3.9	3
164	Hierarchical non-negative matrix factorization to characterize brain tumor heterogeneity using multi-parametric MRI. *NMR in Biomedicine*, **2015**, 28, 1599-624	4.4	26
163	Tumour Relapse Prediction Using Multiparametric MR Data Recorded during Follow-Up of GBM Patients. *BioMed Research International*, **2015**, 2015, 842923	3	6
162	Segmentation of Trabecular Jaw Bone on Cone Beam CT Datasets. *Clinical Implant Dentistry and Related Research*, **2015**, 17, 1082-91	3.9	18

161	Convex Non-negative Spherical Factorization of Multi-Shell Diffusion-Weighted Images. *Lecture Notes in Computer Science*, **2015**, 166-173	0.9	5
160	Image registration using mutual information **2015**, 295-308		7
159	Track orientation density imaging (TODI) and track orientation distribution (TOD) based tractography. *NeuroImage*, **2014**, 94, 312-336	7.9	29
158	Multimodal imaging of subventricular zone neural stem/progenitor cells in the cuprizone mouse model reveals increased neurogenic potential for the olfactory bulb pathway, but no contribution to remyelination of the corpus callosum. *NeuroImage*, **2014**, 86, 99-110	7.9	30
157	Assessing age-related gray matter decline with voxel-based morphometry depends significantly on segmentation and normalization procedures. *Frontiers in Aging Neuroscience*, **2014**, 6, 124	5.3	31
156	Registration-based filtering: An acceptable tool for noise reduction in left ventricular dynamic rotational angiography images? **2014**,		2
155	Effects of immediate and delayed loading on peri-implant trabecular structures: a cone beam CT evaluation. *Clinical Implant Dentistry and Related Research*, **2014**, 16, 873-83	3.9	19
154	Dosimetric adaptive IMRT driven by fiducial points. *Medical Physics*, **2014**, 41, 061716	4.4	12
153	Early decrease of type 1 cannabinoid receptor binding and phosphodiesterase 10A activity in vivo in R6/2 Huntington mice. *Neurobiology of Aging*, **2014**, 35, 2858-2869	5.6	27
152	Unsupervised segmentation, clustering, and groupwise registration of heterogeneous populations of brain MR images. *IEEE Transactions on Medical Imaging*, **2014**, 33, 201-24	11.7	30
151	Groupwise Deformable Registration of Fiber Track Sets Using Track Orientation Distributions. *Mathematics and Visualization*, **2014**, 151-161	0.6	2
150	Simultaneous segmentation and anatomical labeling of the cerebral vasculature. *Lecture Notes in Computer Science*, **2014**, 17, 307-14	0.9	5
149	Fiber Bundle Segmentation Using Spectral Embedding and Supervised Learning. *Mathematics and Visualization*, **2014**, 103-114	0.6	4
148	Atlas-Guided Global Tractography: Imposing a Prior on the Local Track Orientation. *Mathematics and Visualization*, **2014**, 115-123	0.6	3
147	Elastic image registration to quantify 3-D regional myocardial deformation from volumetric ultrasound: experimental validation in an animal model. *Ultrasound in Medicine and Biology*, **2013**, 39, 1688-97	3.5	27
146	Elastic image registration versus speckle tracking for 2-D myocardial motion estimation: a direct comparison in vivo. *IEEE Transactions on Medical Imaging*, **2013**, 32, 449-59	11.7	42
145	A comparative evaluation of cone beam CT and micro-CT on trabecular bone structures in the human mandible. *Dentomaxillofacial Radiology*, **2013**, 42, 20130145	3.9	50
144	Three-Dimensional Cardiac Motion Estimation Based on Non-rigid Image Registration Using a Novel Transformation Model Adapted to the Heart. *Lecture Notes in Computer Science*, **2013**, 142-150	0.9	9

143	Anatomical labeling of the circle of willis using maximum a posteriori graph matching. *Lecture Notes in Computer Science*, **2013**, 16, 566-73	0.9	3
142	An automated pipeline for regional cardiac strain estimation from volumetric ultrasound data **2013**,		1
141	Calibrating page sized Gafchromic EBT3 films. *Medical Physics*, **2013**, 40, 012102	4.4	47
140	Influence of the Grid Topology of Free-Form Deformation Models on the Performance of 3D Strain Estimation in Echocardiography. *Lecture Notes in Computer Science*, **2013**, 308-315	0.9	4
139	Intra-patient Non-rigid Registration of 3D Vascular Cerebral Images. *Lecture Notes in Computer Science*, **2013**, 106-113	0.9	1
138	Quantitative evaluation of MRI-based tracking of ferritin-labeled endogenous neural stem cell progeny in rodent brain. *NeuroImage*, **2012**, 62, 367-80	7.9	56
137	Motion and deformation estimation of cardiac ultrasound sequences using an anatomical B-spline transformation model **2012**,		3
136	**2012**,		1
135	TH-E-BRB-03: Incorporating a Lateral Scan Effect Correction in a EBT3 Calibration Protocol. *Medical Physics*, **2012**, 39, 4009-4009	4.4	5
134	A 3D+Time Spatio-temporal Model for Joint Segmentation and Registration of Sparse Cardiac Cine MR Image Stacks. *Lecture Notes in Computer Science*, **2012**, 198-206	0.9	2
133	Development of micro-CT protocols for in vivo follow-up of mouse bone architecture without major radiation side effects. *Bone*, **2011**, 49, 613-22	4.7	69
132	Impact of RF inhomogeneity correction on image registration of micro MRI rodent brain images **2011**,		2
131	Intrafractional prostate motion during online image guided intensity-modulated radiotherapy for prostate cancer. *Radiotherapy and Oncology*, **2011**, 98, 181-6	5.3	34
130	Metabolic and type 1 cannabinoid receptor imaging of a transgenic rat model in the early phase of Huntington disease. *Experimental Neurology*, **2011**, 229, 440-9	5.7	28
129	Analysis of intensity variability in multislice and cone beam computed tomography. *Clinical Oral Implants Research*, **2011**, 22, 873-9	4.8	111
128	Evaluation of the specificity and sensitivity of ferritin as an MRI reporter gene in the mouse brain using lentiviral and adeno-associated viral vectors. *Gene Therapy*, **2011**, 18, 594-605	4	55
127	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. *Cardiovascular Research*, **2011**, 89, 166-74	9.9	12
126	An iterative dual energy CT reconstruction method for a K-edge contrast material **2011**,		6

125	Feasibility and advantages of diffusion weighted imaging atlas construction in Q-space. *Lecture Notes in Computer Science*, **2011**, 14, 166-73	0.9	10
124	Semisupervised Probabilistic Clustering of Brain MR Images Including Prior Clinical Information. *Lecture Notes in Computer Science*, **2011**, 184-194	0.9	1
123	SPARC: Unified framework for automatic segmentation, probabilistic atlas construction, registration and clustering of brain MR images **2010**,		4
122	Differential effects of progenitor cell populations on left ventricular remodeling and myocardial neovascularization after myocardial infarction. *Journal of the American College of Cardiology*, **2010**, 55, 2232-43	15.1	90
121	**2010**,		1
120	Fast, accurate, and robust automatic marker detection for motion correction based on oblique kV or MV projection image pairs. *Medical Physics*, **2010**, 37, 1554-64	4.4	18
119	Closed-chest animal model of chronic coronary artery stenosis. Assessment with magnetic resonance imaging. *International Journal of Cardiovascular Imaging*, **2010**, 26, 299-308	2.5	10
118	Nonrigid image registration using conditional mutual information. *IEEE Transactions on Medical Imaging*, **2010**, 29, 19-29	11.7	156
117	Automatic 3-D breath-hold related motion correction of dynamic multislice MRI. *IEEE Transactions on Medical Imaging*, **2010**, 29, 868-78	11.7	23
116	The minimal entropy prior for simultaneous reconstruction and segmentation of in vivo microct trabecular bone images **2009**,		3
115	Adenosine-induced ventricular asystole or rapid ventricular pacing to enhance three-dimensional rotational imaging during cardiac ablation procedures. *Europace*, **2009**, 11, 751-62	3.9	30
114	Diffusion-weighted versus volumetric imaging of the striatum in early symptomatic Huntington disease. *Journal of Neurology*, **2009**, 256, 109-14	5.5	40
113	Bone quality assessment based on cone beam computed tomography imaging. *Clinical Oral Implants Research*, **2009**, 20, 767-71	4.8	105
112	Biological image-guided radiotherapy in rectal cancer: challenges and pitfalls. *International Journal of Radiation Oncology Biology Physics*, **2009**, 75, 782-90	4	43
111	A semi-automated 2D/3D marker-based registration algorithm modelling prostate shrinkage during radiotherapy for prostate cancer. *Radiotherapy and Oncology*, **2009**, 90, 331-6	5.3	11
110	An Elasticity Penalty: Mixing FEM and Nonrigid Registration. *IFMBE Proceedings*, **2009**, 709-712	0.2	1
109	Three-dimensional cardiac strain estimation using spatio-temporal elastic registration of ultrasound images: a feasibility study. *IEEE Transactions on Medical Imaging*, **2008**, 27, 1580-91	11.7	126
108	Comparative study of image quality for MSCT and CBCT scanners for dentomaxillofacial radiology applications. *Radiation Protection Dosimetry*, **2008**, 129, 222-6	0.9	56

107	Comparative localized linear accuracy of small-field cone-beam CT and multislice CT for alveolar bone measurements. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics*, **2008**, 105, 512-8		137
106	On the construction of an inter-subject diffusion tensor magnetic resonance atlas of the healthy human brain. *NeuroImage*, **2008**, 43, 69-80	7.9	71
105	Biplane three-dimensional augmented fluoroscopy as single navigation tool for ablation of atrial fibrillation: accuracy and clinical value. *Heart Rhythm*, **2008**, 5, 957-64	6.7	60
104	Remodeling of T-tubules and reduced synchrony of Ca2+ release in myocytes from chronically ischemic myocardium. *Circulation Research*, **2008**, 102, 338-46	15.7	187
103	A statistical framework for the registration of 3D knee implant components to single-plane X-ray images **2008**,		2
102	Biological image-guided radiotherapy in rectal cancer: is there a role for FMISO or FLT, next to FDG?. *Acta Oncologica*, **2008**, 47, 1237-48	3.2	65
101	Image quality vs radiation dose of four cone beam computed tomography scanners. *Dentomaxillofacial Radiology*, **2008**, 37, 309-18	3.9	100
100	3D cardiac strain estimation using spatio-temporal elastic registration: In-vivo application **2008**,		1
99	Estimation of 3D cardiac deformation using spatio-temporal elastic registration of non-scanconverted ultrasound data **2008**,		2
98	Changes in left atrial anatomy due to respiration: impact on three-dimensional image integration during atrial fibrillation ablation. *Journal of Cardiovascular Electrophysiology*, **2008**, 19, 828-34	2.7	43
97	Model-based segmentation using graph representations. *Lecture Notes in Computer Science*, **2008**, 11, 393-400	0.9	6
96	Adaptive boundary conditions for physically based follow-up breast MR image registration. *Lecture Notes in Computer Science*, **2008**, 11, 839-46	0.9	7
95	Minimal shape and intensity cost path segmentation. *IEEE Transactions on Medical Imaging*, **2007**, 26, 1115-29	11.7	71
94	Nonrigid registration for subtraction CT angiography applied to the carotids and cranial arteries. *Academic Radiology*, **2007**, 14, 1562-76	4.3	15
93	Predicting soft tissue deformations for a maxillofacial surgery planning system: from computational strategies to a complete clinical validation. *Medical Image Analysis*, **2007**, 11, 282-301	15.4	119
92	Volumetric analysis of extraction sockets using cone beam computed tomography: a pilot study on ex vivo jaw bone. *Journal of Clinical Periodontology*, **2007**, 34, 985-90	7.7	48
91	P4A-5 3D Cardiac Strain Estimation Using Spatio-Temporal Elastic Registration: In Silico Validation **2007**,		2
90	Images in cardiovascular medicine. Changes in left atrial and pulmonary venous anatomy during respiration: a 4-dimensional computed tomography-based assessment and implications for atrial fibrillation ablation. *Circulation*, **2007**, 115, e617-9	16.7	3

89	Linear normalization of MR brain images in pediatric patients with periventricular leukomalacia. *NeuroImage*, **2007**, 35, 686-97	7.9	14
88	Evaluation of a novel calibration technique for optically tracked oblique laparoscopes. *Lecture Notes in Computer Science*, **2007**, 10, 467-74	0.9	4
87	SU-DD-A4-01: Nonrigid Registration of Mesorectal Region for PET Signal Follow-Up During Radiation Therapy. *Medical Physics*, **2007**, 34, 2326-2326	4.4	
86	Atlas-to-image non-rigid registration by minimization of conditional local entropy. *Information Processing in Medical Imaging*, **2007**, 20, 320-32		8
85	Nonrigid image registration using conditional mutual information. *Information Processing in Medical Imaging*, **2007**, 20, 725-37		13
84	Magnetization transfer analysis of cartilage repair tissue: a preliminary study. *Skeletal Radiology*, **2006**, 35, 903-8	2.7	17
83	A New Cone-beam Computed Tomography System for Dental Applications with Innovative 3D Software. *International Journal of Computer Assisted Radiology and Surgery*, **2006**, 1, 389-402	3.9	4
82	Non-rigid brain image registration using a statistical deformation model **2006**,		5
81	Pre-operative simulation and post-operative validation of soft-tissue deformations for breast implantation planning **2006**, 6141, 295		3
80	Biomechanically based elastic breast registration using mass tensor simulation. *Lecture Notes in Computer Science*, **2006**, 9, 718-25	0.9	10
79	Non-rigid image registration using mutual information **2006**, 91-103		
78	Non-rigid registration with position dependent rigidity for whole body PET follow-up studies **2006**,		5
77	Computer-aided detection of colonic polyps using low-dose CT acquisitions. *Academic Radiology*, **2006**, 13, 1062-71	4.3	7
76	Assessment of bone segmentation quality of cone-beam CT versus multislice spiral CT: a pilot study. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics*, **2006**, 102, 225-34		113
75	Image segmentation using local shape and gray-level appearance models **2006**,		8
74	3D soft tissue predictions with a tetrahedral mass tensor model for a maxillofacial planning system: a quantitative validation study **2006**,		2
73	Large-scale validation of non-rigid registration algorithms for atlas-based brain image segmentation **2006**,		1
72	An information theoretic approach for non-rigid image registration using voxel class probabilities. *Medical Image Analysis*, **2006**, 10, 413-31	15.4	24

71	A Unified Framework for Atlas Based Brain Image Segmentation and Registration. *Lecture Notes in Computer Science*, **2006**, 136-143	0.9	10
70	Comparison Between Parzen Window Interpolation and Generalised Partial Volume Estimation for Nonrigid Image Registration Using Mutual Information. *Lecture Notes in Computer Science*, **2006**, 206-213	0.9	6
69	Nonrigid Registration of Multitemporal CT and MR Images for Radiotherapy Treatment Planning. *Lecture Notes in Computer Science*, **2006**, 297-305	0.9	4
68	Parameter Optimisation of a Linear Tetrahedral Mass Tensor Model for a Maxillofacial Soft Tissue Simulator. *Lecture Notes in Computer Science*, **2006**, 159-168	0.9	8
67	Simulation of Soft-Tissue Deformations for Breast Augmentation Planning. *Lecture Notes in Computer Science*, **2006**, 197-205	0.9	13
66	Image Based Musculoskeletal Modeling Allows Personalized Biomechanical Analysis of Gait. *Lecture Notes in Computer Science*, **2006**, 58-66	0.9	16
65	High-speed digital imaging method for ciliary beat frequency measurement. *Journal of Pharmacy and Pharmacology*, **2005**, 57, 521-6	4.8	35
64	Model-Based Brain Tissue Classification **2005**, 1-55		
63	Automatic analysis of cerebral asymmetry: an exploratory study of the relationship between brain torque and planum temporale asymmetry. *NeuroImage*, **2005**, 24, 678-91	7.9	90
62	Feature-based statistical analysis of structural MR data for automatic detection of focal cortical dysplastic lesions. *NeuroImage*, **2005**, 27, 253-66	7.9	18
61	An augmented reality system for patient-specific guidance of cardiac catheter ablation procedures. *IEEE Transactions on Medical Imaging*, **2005**, 24, 1512-24	11.7	50
60	Subtraction CT angiography using non-rigid registration: The impact of similarity measure and image pre-processing. *International Congress Series*, **2005**, 1281, 328-333		
59	Incorporating novel image processing methods in a hospital-wide PACS. *International Congress Series*, **2005**, 1281, 1016-1021		4
58	Construction and validation of mean shape atlas templates for atlas-based brain image segmentation. *Lecture Notes in Computer Science*, **2005**, 19, 689-700	0.9	32
57	Magnetic resonance imaging study of the level of termination of the conus medullaris and the thecal sac: influence of age and gender. *Spine*, **2005**, 30, 1875-80	3.3	78
56	Relationship between multiple sclerosis intention tremor severity and lesion load in the brainstem. *NeuroReport*, **2005**, 16, 1379-82	1.7	44
55	Accuracy of magnetic resonance imaging for measuring fetal sheep lungs and other organs. *Ultrasound in Obstetrics and Gynecology*, **2005**, 25, 270-6	5.8	27
54	Clinical validation of high-resolution fast spin-echo MR colonography after colon distention with air. *Journal of Magnetic Resonance Imaging*, **2005**, 22, 400-5	5.6	18

53	Combined T1-T2 mapping of human femoro-tibial cartilage with turbo-mixed imaging at 1.5T. *Journal of Magnetic Resonance Imaging*, **2005**, 22, 368-72	5.6	12
52	Cardiac three-dimensional magnetic resonance imaging and fluoroscopy merging: a new approach for electroanatomic mapping to assist catheter ablation. *Circulation*, **2005**, 112, 3769-76	16.7	85
51	Radiation dose vs. image quality for low-dose CT protocols of the head for maxillofacial surgery and oral implant planning. *Radiation Protection Dosimetry*, **2005**, 117, 211-6	0.9	48
50	Removal of Plaque and Stent Artifacts in Subtraction CT Angiography Using Nonrigid Registration and a Volume Penalty. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2005**, 2005, 4294-7		2
49	Plaque and stent artifact reduction in subtraction CT angiography using nonrigid registration and a volume penalty. *Lecture Notes in Computer Science*, **2005**, 8, 361-8	0.9	4
48	Non-rigid Atlas-to-Image Registration by Minimization of Class-Conditional Image Entropy. *Lecture Notes in Computer Science*, **2004**, 745-753	0.9	14
47	Construction of a Brain Template from MR Images Using State-of-the-Art Registration and Segmentation Techniques. *Lecture Notes in Computer Science*, **2004**, 696-703	0.9	23
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