Frederik Maes

List of Publications by Citations

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	Multimodality image registration by maximization of mutual information. *IEEE Transactions on Medical Imaging*, **1997**, 16, 187-98	11.7	2961
231	Automated model-based tissue classification of MR images of the brain. *IEEE Transactions on Medical Imaging*, **1999**, 18, 897-908	11.7	746
230	Comparison and evaluation of retrospective intermodality brain image registration techniques. *Journal of Computer Assisted Tomography*, **1997**, 21, 554-66	2.2	608
229	Automated model-based bias field correction of MR images of the brain. *IEEE Transactions on Medical Imaging*, **1999**, 18, 885-96	11.7	433
228	Automated segmentation of multiple sclerosis lesions by model outlier detection. *IEEE Transactions on Medical Imaging*, **2001**, 20, 677-88	11.7	346
227	Comparative evaluation of multiresolution optimization strategies for multimodality image registration by maximization of mutual information. *Medical Image Analysis*, **1999**, 3, 373-86	15.4	285
226	ISLES 2015 - A public evaluation benchmark for ischemic stroke lesion segmentation from multispectral MRI. *Medical Image Analysis*, **2017**, 35, 250-269	15.4	248
225	Medical image registration using mutual information. *Proceedings of the IEEE*, **2003**, 91, 1699-1722	14.3	218
224	A unifying framework for partial volume segmentation of brain MR images. *IEEE Transactions on Medical Imaging*, **2003**, 22, 105-19	11.7	190
223	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
222	The contribution of magnetic resonance imaging to the three-dimensional treatment planning of localized prostate cancer. *International Journal of Radiation Oncology Biology Physics*, **1999**, 45, 857-65	4	183
221	Nonrigid image registration using conditional mutual information. *IEEE Transactions on Medical Imaging*, **2010**, 29, 19-29	11.7	156
220	Automatic 3-D segmentation of internal structures of the head in MR images using a combination of similarity and free-form transformations: Part I, Methodology and validation on normal subjects. *IEEE Transactions on Medical Imaging*, **1999**, 18, 909-16	11.7	155
219	A viscous fluid model for multimodal non-rigid image registration using mutual information. *Medical Image Analysis*, **2003**, 7, 565-75	15.4	152
218	Automatic segmentation and volumetry of multiple sclerosis brain lesions from MR images. *NeuroImage: Clinical*, **2015**, 8, 367-75	5.3	149
217	Interobserver variations in gross tumor volume delineation of brain tumors on computed tomography and impact of magnetic resonance imaging. *Radiotherapy and Oncology*, **2001**, 60, 49-59	5.3	144
216	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

215	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
214	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
213	FDG-PET scan in potentially operable non-small cell lung cancer: do anatometabolic PET-CT fusion images improve the localisation of regional lymph node metastases? The Leuven Lung Cancer Group. *European Journal of Nuclear Medicine and Molecular Imaging*, **1998**, 25, 1495-501	8.8	114
212	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
211	Analysis of intensity variability in multislice and cone beam computed tomography. *Clinical Oral Implants Research*, **2011**, 22, 873-9	4.8	111
210	Bone quality assessment based on cone beam computed tomography imaging. *Clinical Oral Implants Research*, **2009**, 20, 767-71	4.8	105
209	Image quality vs radiation dose of four cone beam computed tomography scanners. *Dentomaxillofacial Radiology*, **2008**, 37, 309-18	3.9	100
208	Global tractography of multi-shell diffusion-weighted imaging data using a multi-tissue model. *NeuroImage*, **2015**, 123, 89-101	7.9	94
207	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
206	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
205	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
204	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
203	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
202	Minimal shape and intensity cost path segmentation. *IEEE Transactions on Medical Imaging*, **2007**, 26, 1115-29	11.7	71
201	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
200	Dry preparation for virtual CT colonography with fecal tagging using water-soluble contrast medium: initial results. *European Radiology*, **2003**, 13, 453-8	8	69
199	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
198	Evaluation of image features and search strategies for segmentation of bone structures in radiographs using Active Shape Models. *Medical Image Analysis*, **2002**, 6, 47-62	15.4	61

197	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
196	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
195	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
194	Comparative study of image quality for MSCT and CBCT scanners for dentomaxillofacial radiology applications. *Radiation Protection Dosimetry*, **2008**, 129, 222-6	0.9	56
193	High-spatial-resolution 3D balanced turbo field-echo technique for MR angiography of the renal arteries: initial experience. *Radiology*, **2004**, 231, 237-42	20.5	56
192	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
191	Lipid availability determines fate of skeletal progenitor cells via SOX9. *Nature*, **2020**, 579, 111-117	50.4	53
190	Dynamic contrast-enhanced MRI of the pancreas: initial results in healthy volunteers and patients with chronic pancreatitis. *Journal of Magnetic Resonance Imaging*, **2004**, 20, 990-7	5.6	52
189	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
188	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
187	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
186	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
185	Comparison of unsupervised classification methods for brain tumor segmentation using multi-parametric MRI. *NeuroImage: Clinical*, **2016**, 12, 753-764	5.3	48
184	Calibrating page sized Gafchromic EBT3 films. *Medical Physics*, **2013**, 40, 012102	4.4	47
183	Non-rigid multimodal image registration using mutual information. *Lecture Notes in Computer Science*, **1998**, 1099-1106	0.9	46
182	Magnetic resonance angiography in suspected cerebral vasculitis. *European Radiology*, **2004**, 14, 1005-128		44
181	Relationship between multiple sclerosis intention tremor severity and lesion load in the brainstem. *NeuroReport*, **2005**, 16, 1379-82	1.7	44
180	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

179	Biological image-guided radiotherapy in rectal cancer: challenges and pitfalls. *International Journal of Radiation Oncology Biology Physics*, **2009**, 75, 782-90	4	43
178	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
177	Quantifying myocardial deformation throughout the cardiac cycle: a comparison of ultrasound strain rate, grey-scale M-mode and magnetic resonance imaging. *Ultrasound in Medicine and Biology* , **2004**, 30, 591-8	3.5	43
176	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
175	Diffusion-weighted versus volumetric imaging of the striatum in early symptomatic Huntington disease. *Journal of Neurology*, **2009**, 256, 109-14	5.5	40
174	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
173	Accuracy of diffusion-weighted MR imaging in the diagnosis of sporadic Creutzfeldt-Jakob disease. *Journal of Neurology*, **2003**, 250, 222-5	5.5	37
172	Improved visualization of coronary arteries using a new three-dimensional submillimeter MR coronary angiography sequence with balanced gradients. *American Journal of Roentgenology*, **2002**, 179, 901-10	5.4	37
171	Multi-modality image registration by maximization of mutual information **1996**,		36
170	High-speed digital imaging method for ciliary beat frequency measurement. *Journal of Pharmacy and Pharmacology*, **2005**, 57, 521-6	4.8	35
169	Impaired recognition of body expressions in the behavioral variant of frontotemporal dementia. *Neuropsychologia*, **2015**, 75, 496-504	3.2	34
168	Intrafractional prostate motion during online image guided intensity-modulated radiotherapy for prostate cancer. *Radiotherapy and Oncology*, **2011**, 98, 181-6	5.3	34
167	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
166	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
165	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
164	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
163	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
162	Application of a new image analysis technique to study brain asymmetry in schizophrenia. *Psychiatry Research - Neuroimaging*, **2003**, 124, 25-35	2.9	30

161	Track orientation density imaging (TODI) and track orientation distribution (TOD) based tractography. *NeuroImage*, **2014**, 94, 312-336	7.9	29
160	T2 mapping of human femorotibial cartilage with turbo mixed MR imaging at 1.5 T: feasibility. *Radiology*, **2004**, 233, 609-14	20.5	29
159	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
158	Comparison and evaluation of retrospective intermodality image registration techniques **1996**,		28
157	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
156	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
155	Temporal subtraction of thorax CR images using a statistical deformation model. *IEEE Transactions on Medical Imaging*, **2003**, 22, 1490-504	11.7	27
154	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
153	Hierarchical non-negative matrix factorization to characterize brain tumor heterogeneity using multi-parametric MRI. *NMR in Biomedicine*, **2015**, 28, 1599-624	4.4	26
152	Nonrigid Image Registration Using Free-Form Deformations with a Local Rigidity Constraint. *Lecture Notes in Computer Science*, **2004**, 639-646	0.9	26
151	3D volumetric displacement and strain analysis of composite polymerization. *Dental Materials*, **2015**, 31, 453-61	5.7	24
150	Semi-automated brain tumor segmentation on multi-parametric MRI using regularized non-negative matrix factorization. *BMC Medical Imaging*, **2017**, 17, 29	2.9	24
149	An information theoretic approach for non-rigid image registration using voxel class probabilities. *Medical Image Analysis*, **2006**, 10, 413-31	15.4	24
148	A spectroscopic study of the chromatic properties of GafChromicEBT3 films. *Medical Physics*, **2016**, 43, 1156-66	4.4	24
147	Evaluation of tissue displacement and regional strain in the Achilles tendon using quantitative high-frequency ultrasound. *PLoS ONE*, **2017**, 12, e0181364	3.7	23
146	Automatic 3-D breath-hold related motion correction of dynamic multislice MRI. *IEEE Transactions on Medical Imaging*, **2010**, 29, 868-78	11.7	23
145	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
144	Simultaneous segmentation and anatomical labeling of the cerebral vasculature. *Medical Image Analysis*, **2016**, 32, 201-15	15.4	21

143	Patch-Based Super-Resolution of MR Spectroscopic Images: Application to Multiple Sclerosis. *Frontiers in Neuroscience*, **2017**, 11, 13	5.1	20
142	Evaluation of manual vs semi-automated delineation of liver lesions on CT images. *European Radiology*, **1997**, 7, 432-8	8	20
141	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
140	Segmentation of Trabecular Jaw Bone on Cone Beam CT Datasets. *Clinical Implant Dentistry and Related Research*, **2015**, 17, 1082-91	3.9	18
139	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
138	Feature-based statistical analysis of structural MR data for automatic detection of focal cortical dysplastic lesions. *NeuroImage*, **2005**, 27, 253-66	7.9	18
137	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
136	Two Time Point MS Lesion Segmentation in Brain MRI: An Expectation-Maximization Framework. *Frontiers in Neuroscience*, **2016**, 10, 576	5.1	18
135	Convexity-constrained and nonnegativity-constrained spherical factorization in diffusion-weighted imaging. *NeuroImage*, **2017**, 146, 507-517	7.9	17
134	The EASI project--improving the effectiveness and quality of image-guided surgery. *IEEE Transactions on Information Technology in Biomedicine*, **1998**, 2, 156-68		17
133	Magnetization transfer analysis of cartilage repair tissue: a preliminary study. *Skeletal Radiology*, **2006**, 35, 903-8	2.7	17
132	Modeling the dose dependence of the vis-absorption spectrum of EBT3 GafChromic Films. *Medical Physics*, **2017**, 44, 2532-2543	4.4	16
131	Image Based Musculoskeletal Modeling Allows Personalized Biomechanical Analysis of Gait. *Lecture Notes in Computer Science*, **2006**, 58-66	0.9	16
130	Nonrigid registration for subtraction CT angiography applied to the carotids and cranial arteries. *Academic Radiology*, **2007**, 14, 1562-76	4.3	15
129	Quantification of Cerebral Grey and White Matter Asymmetry from MRI. *Lecture Notes in Computer Science*, **1999**, 348-357	0.9	15
128	Linear normalization of MR brain images in pediatric patients with periventricular leukomalacia. *NeuroImage*, **2007**, 35, 686-97	7.9	14
127	Non-rigid Atlas-to-Image Registration by Minimization of Class-Conditional Image Entropy. *Lecture Notes in Computer Science*, **2004**, 745-753	0.9	14
126	Nonrigid image registration using conditional mutual information. *Information Processing in Medical Imaging*, **2007**, 20, 725-37		13

125	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
124	Simulation of Soft-Tissue Deformations for Breast Augmentation Planning. *Lecture Notes in Computer Science*, **2006**, 197-205	0.9	13
123	Classifying Glioblastoma Multiforme Follow-Up Progressive vs. Responsive Forms Using Multi-Parametric MRI Features. *Frontiers in Neuroscience*, **2016**, 10, 615	5.1	12
122	Dosimetric adaptive IMRT driven by fiducial points. *Medical Physics*, **2014**, 41, 061716	4.4	12
121	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. *Cardiovascular Research*, **2011**, 89, 166-74	9.9	12
120	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
119	Non-rigid image registration using a statistical spline deformation model. *Lecture Notes in Computer Science*, **2003**, 18, 463-74	0.9	12
118	Endothelial Msx1 transduces hemodynamic changes into an arteriogenic remodeling response. *Journal of Cell Biology*, **2015**, 210, 1239-56	7.3	11
117	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
116	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
115	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
114	Automated Segmentation of MS Lesions from Multi-channel MR Images. *Lecture Notes in Computer Science*, **1999**, 11-21	0.9	11
113	Online adaptation and verification of VMAT. *Medical Physics*, **2015**, 42, 3877-91	4.4	10
112	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
111	Biomechanically based elastic breast registration using mass tensor simulation. *Lecture Notes in Computer Science*, **2006**, 9, 718-25	0.9	10
110	Feasibility and advantages of diffusion weighted imaging atlas construction in Q-space. *Lecture Notes in Computer Science*, **2011**, 14, 166-73	0.9	10
109	Image-based in vivo assessment of targeting accuracy of stereotactic brain surgery in experimental rodent models. *Scientific Reports*, **2016**, 6, 38058	4.9	10
108	A Unified Framework for Atlas Based Brain Image Segmentation and Registration. *Lecture Notes in Computer Science*, **2006**, 136-143	0.9	10

107	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
106	Retrospective correction of the heel effect in hand radiographs. *Medical Image Analysis*, **2002**, 6, 183-90	15.4	9
105	Image segmentation using local shape and gray-level appearance models **2006**,		8
104	Automatic segmentation of brain tissues and MR bias field correction using a digital brain atlas. *Lecture Notes in Computer Science*, **1998**, 1222-1229	0.9	8
103	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
102	Atlas-to-image non-rigid registration by minimization of conditional local entropy. *Information Processing in Medical Imaging*, **2007**, 20, 320-32		8
101	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
100	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
99	Optimized preoperative motor cortex mapping in brain tumors using advanced processing of transcranial magnetic stimulation data. *NeuroImage: Clinical*, **2019**, 21, 101657	5.3	7
98	Computer-aided detection of colonic polyps using low-dose CT acquisitions. *Academic Radiology*, **2006**, 13, 1062-71	4.3	7
97	Automatic 3D segmentation of internal structures of the head in MR images using a combination of similarity and free-form transformations **1998**,		7
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	Artificial intelligence and its impact on quality improvement in upper and lower gastrointestinal endoscopy. *Digestive Endoscopy*, **2021**, 33, 242-253	3.7	7
94	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
93	Image registration using mutual information **2015**, 295-308		7
92	3D Tendon Strain Estimation Using High-frequency Volumetric Ultrasound Images: A Feasibility Study. *Ultrasonic Imaging*, **2018**, 40, 67-83	1.9	6
91	Tumour Relapse Prediction Using Multiparametric MR Data Recorded during Follow-Up of GBM Patients. *BioMed Research International*, **2015**, 2015, 842923	3	6
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89	Model-based segmentation using graph representations. *Lecture Notes in Computer Science*, **2008**, 11, 393-400	0.9	6
88	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
87	The Role of Medical Image Computing and Machine Learning in Healthcare **2019**, 9-23		5
86	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
85	Non-rigid brain image registration using a statistical deformation model **2006**,		5
84	Non-rigid registration with position dependent rigidity for whole body PET follow-up studies **2006**,		5
83	TH-E-BRB-03: Incorporating a Lateral Scan Effect Correction in a EBT3 Calibration Protocol. *Medical Physics*, **2012**, 39, 4009-4009	4.4	5
82	Simultaneous segmentation and anatomical labeling of the cerebral vasculature. *Lecture Notes in Computer Science*, **2014**, 17, 307-14	0.9	5
81	Convex Non-negative Spherical Factorization of Multi-Shell Diffusion-Weighted Images. *Lecture Notes in Computer Science*, **2015**, 166-173	0.9	5
80	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
79	A Statistical Framework for Partial Volume Segmentation. *Lecture Notes in Computer Science*, **2001**, 204-212	0.9	5
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77	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
76	SPARC: Unified framework for automatic segmentation, probabilistic atlas construction, registration and clustering of brain MR images **2010**,		4
75	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
74	Incorporating novel image processing methods in a hospital-wide PACS. *International Congress Series*, **2005**, 1281, 1016-1021		4
73	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
72	Evaluation of a novel calibration technique for optically tracked oblique laparoscopes. *Lecture Notes in Computer Science*, **2007**, 10, 467-74	0.9	4

71	Fiber Bundle Segmentation Using Spectral Embedding and Supervised Learning. *Mathematics and Visualization*, **2014**, 103-114	0.6	4
70	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
69	Potential benefits of dosimetric VMAT tracking verified with 3D film measurements. *Medical Physics*, **2016**, 43, 2162	4.4	4
68	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
67	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
66	Nonrigid Registration of Multitemporal CT and MR Images for Radiotherapy Treatment Planning. *Lecture Notes in Computer Science*, **2006**, 297-305	0.9	4
65	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
64	Left ventricular four-dimensional rotational angiography with low radiation dose through interphase registration. *Europace*, **2015**, 17, 152-9	3.9	3
63	Patch based super-resolution of MR spectroscopic images **2016**,		3
62	Preprocessing of Heteroscedastic Medical Images. *IEEE Access*, **2018**, 6, 26047-26058	3.5	3
61	Unsupervised Framework for Consistent Longitudinal MS Lesion Segmentation. *Lecture Notes in Computer Science*, **2017**, 208-219	0.9	3
60	Motion and deformation estimation of cardiac ultrasound sequences using an anatomical B-spline transformation model **2012**,		3
59	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
58	The minimal entropy prior for simultaneous reconstruction and segmentation of in vivo microct trabecular bone images **2009**,		3
57	Pre-operative simulation and post-operative validation of soft-tissue deformations for breast implantation planning **2006**, 6141, 295		3
56	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
55	Atlas-Guided Global Tractography: Imposing a Prior on the Local Track Orientation. *Mathematics and Visualization*, **2014**, 115-123	0.6	3
54	A Semi-Automated Segmentation Framework for MRI Based Brain Tumor Segmentation Using Regularized Nonnegative Matrix Factorization **2016**,		3

53	Deep learning for elective neck delineation: More consistent and time efficient. *Radiotherapy and Oncology*, **2020**, 153, 180-188	5.3	2
52	Sa2012 AUTOMATED POLYP SIZE ESTIMATION WITH DEEP LEARNING REDUCES INTEROBSERVER VARIABILITY. *Gastrointestinal Endoscopy*, **2020**, 91, AB241-AB242	5.2	2
51	Tu1959 BLI AND LCI IMPROVE POLYP DETECTION AND DELINEATION ACCURACY FOR DEEP LEARNING NETWORKS. *Gastrointestinal Endoscopy*, **2019**, 89, AB632	5.2	2
50	Registration-based filtering: An acceptable tool for noise reduction in left ventricular dynamic rotational angiography images? **2014**,		2
49	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
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