Frederik Maes

List of Publications by Year
in descending order

245 papers	15,418 citations	36271 51 h-index	19726 117 g-index
253 all docs	253 docs citations	253 times ranked	14327 citing authors

#	ARTICLE	IF	CITATIONS
1	Multimodality image registration by maximization of mutual information. IEEE Transactions on Medical Imaging, 1997, 16, 187-198.	5.4	3,793
2	Automated model-based tissue classification of MR images of the brain. IEEE Transactions on Medical Imaging, 1999, 18, 897-908.	5.4	903
3	Comparison and Evaluation of Retrospective Intermodality Brain Image Registration Techniques. Journal of Computer Assisted Tomography, 1997, 21, 554-568.	0.5	743
4	Automated model-based bias field correction of MR images of the brain. IEEE Transactions on Medical Imaging, 1999, 18, 885-896.	5.4	529
5	Automated segmentation of multiple sclerosis lesions by model outlier detection. IEEE Transactions on Medical Imaging, 2001, 20, 677-688.	5.4	417
6	ISLES 2015 - A public evaluation benchmark for ischemic stroke lesion segmentation from multispectral MRI. Medical Image Analysis, 2017, 35, 250-269.	7.0	360
7	Comparative evaluation of multiresolution optimization strategies for multimodality image registration by maximization of mutual information. Medical Image Analysis, 1999, 3, 373-386.	7.0	350
8	Medical image registration using mutual information. Proceedings of the IEEE, 2003, 91, 1699-1722.	16.4	309
9	A unifying framework for partial volume segmentation of brain MR images. IEEE Transactions on Medical Imaging, 2003, 22, 105-119.	5.4	242
10	Nonrigid Image Registration Using Conditional Mutual Information. IEEE Transactions on Medical Imaging, 2010, 29, 19-29.	5.4	211
11	Remodeling of T-Tubules and Reduced Synchrony of Ca^{2+} Release in Myocytes From Chronically Ischemic Myocardium. Circulation Research, 2008, 102, 338-346.	2.0	208
12	Multi-modality image registration by maximization of mutual information. , 1996, , .		207
13	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, 857-865.	0.4	204
14	Automatic segmentation and volumetry of multiple sclerosis brain lesions from MR images. NeuroImage: Clinical, 2015, 8, 367-375.	1.4	196
15	A viscous fluid model for multimodal non-rigid image registration using mutual information. Medical Image Analysis, 2003, 7, 565-575.	7.0	195
16	Automatic 3-D segmentation of internal structures of the head in MR images using a combination of similarity and free-form transformations. I. Methodology and validation on normal subjects. IEEE Transactions on Medical Imaging, 1999, 18, 909-916.	5.4	187
17	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.	5.4	186
18	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.	0.3	169

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#	ARTICLE	IF	CITATIONS
19	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, 512-518.	1.6	160
20	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.	7.0	149
21	Three-Dimensional Cardiac Strain Estimation Using Spatio–Temporal Elastic Registration of Ultrasound Images: A Feasibility Study. IEEE Transactions on Medical Imaging, 2008, 27, 1580-1591.	5.4	148
22	Analysis of intensity variability in multislice and cone beam computed tomography. Clinical Oral Implants Research, 2011, 22, 873-879.	1.9	145
23	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?. European Journal of Nuclear Medicine and Molecular Imaging, 1998, 25, 1495-1501.	3.3	142
24	Lipid availability determines fate of skeletal progenitor cells via SOX9. Nature, 2020, 579, 111-117.	13.7	140
25	Optimizing the Dice Score and Jaccard Index for Medical Image Segmentation: Theory and Practice. Lecture Notes in Computer Science, 2019, , 92-100.	1.0	133
26	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, 225-234.	1.6	130
27	Global tractography of multi-shell diffusion-weighted imaging data using a multi-tissue model. NeuroImage, 2015, 123, 89-101.	2.1	128
28	Bone quality assessment based on cone beam computed tomography imaging. Clinical Oral Implants Research, 2009, 20, 767-771.	1.9	127
29	Image quality *vs* radiation dose of four cone beam computed tomography scanners. Dentomaxillofacial Radiology, 2008, 37, 309-319.	1.3	118
30	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, 2232-2243.	1.2	104
31	Cardiac Three-Dimensional Magnetic Resonance Imaging and Fluoroscopy Merging. Circulation, 2005, 112, 3769-3776.	1.6	102
32	Automatic analysis of cerebral asymmetry: an exploratory study of the relationship between brain torque and planum temporale asymmetry. NeuroImage, 2005, 24, 678-691.	2.1	100
33	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, 1875-1880.	1.0	96
34	\<title\>Comparison and evaluation of retrospective intermodality image registration techniques\</title\>. , 1996, , .		90
35	Development of micro-CT protocols for in vivo follow-up of mouse bone architecture without major radiation side effects. Bone, 2011, 49, 613-622.	1.4	82
36	Minimal Shape and Intensity Cost Path Segmentation. IEEE Transactions on Medical Imaging, 2007, 26, 1115-1129.	5.4	81

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37	Non-rigid multimodal image registration using mutual information. Lecture Notes in Computer Science, 1998, , 1099-1106.	1.0	80
38	Benefits of deep learning for delineation of organs at risk in head and neck cancer. Radiotherapy and Oncology, 2019, 138, 68-74.	0.3	79
39	Dry preparation for virtual CT colonography with fecal tagging using water-soluble contrast medium: initial results. European Radiology, 2003, 13, 453-458.	2.3	78
40	On the construction of an inter-subject diffusion tensor magnetic resonance atlas of the healthy human brain. NeuroImage, 2008, 43, 69-80.	2.1	76
41	Biological image-guided radiotherapy in rectal cancer: Is there a role for FMISO or FLT, next to FDG?. Acta Oncológica, 2008, 47, 1237-1248.	0.8	76
42	Biplane three-dimensional augmented fluoroscopy as single navigation tool for ablation of atrial fibrillation: Accuracy and clinical value. Heart Rhythm, 2008, 5, 957-964.	0.3	73
43	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.	7.0	72
44	A comparative evaluation of cone beam CT and micro-CT on trabecular bone structures in the human mandible. Dentomaxillofacial Radiology, 2013, 42, 20130145.	1.3	68
45	An augmented reality system for patient-specific guidance of cardiac catheter ablation procedures. IEEE Transactions on Medical Imaging, 2005, 24, 1512-1524.	5.4	67
46	Comparative study of image quality for MSCT and CBCT scanners for dentomaxillofacial radiology applications. Radiation Protection Dosimetry, 2008, 129, 222-226.	0.4	66
47	Comparison of unsupervised classification methods for brain tumor segmentation using multi-parametric MRI. NeuroImage: Clinical, 2016, 12, 753-764.	1.4	64
48	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.	2.3	63
49	High-Spatial-Resolution 3D Balanced Turbo Field-Echo Technique for MR Angiography of the Renal Arteries: Initial Experience. Radiology, 2004, 231, 237-242.	3.6	61
50	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, 211-216.	0.4	59
51	Quantitative evaluation of MRI-based tracking of ferritin-labeled endogenous neural stem cell progeny in rodent brain. NeuroImage, 2012, 62, 367-380.	2.1	59
52	Elastic Image Registration Versus Speckle Tracking for 2-D Myocardial Motion Estimation: A Direct Comparison In Vivo. IEEE Transactions on Medical Imaging, 2013, 32, 449-459.	5.4	55
53	Accuracy of diffusion-weighted MR imaging in the diagnosis of sporadic Creutzfeldt-Jakob disease. Journal of Neurology, 2003, 250, 222-225.	1.8	54
54	Dynamic contrast-enhanced MRI of the pancreas: Initial results in healthy volunteers and patients with chronic pancreatitis. Journal of Magnetic Resonance Imaging, 2004, 20, 990-997.	1.9	54

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55	Volumetric analysis of extraction sockets using cone beam computed tomography: a pilot study on ex vivo jaw bone. Journal of Clinical Periodontology, 2007, 34, 985-990.	2.3	54
56	Changes in Left Atrial Anatomy Due to Respiration: Impact on Three‐Dimensional Image Integration During Atrial Fibrillation Ablation. Journal of Cardiovascular Electrophysiology, 2008, 19, 828-834.	0.8	52
57	Assessing age-related gray matter decline with voxel-based morphometry depends significantly on segmentation and normalization procedures. Frontiers in Aging Neuroscience, 2014, 6, 124.	1.7	52
58	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, 591-598.	0.7	51
59	Calibrating page sized Gafchromic EBT3 films. Medical Physics, 2013, 40, 012102.	1.6	51
60	Magnetic resonance angiography in suspected cerebral vasculitis. European Radiology, 2004, 14, 1005-1012.	2.3	50
61	Relationship between multiple sclerosis intention tremor severity and lesion load in the brainstem. NeuroReport, 2005, 16, 1379-1382.	0.6	50
62	Biological Image-Guided Radiotherapy in Rectal Cancer: Challenges and Pitfalls. International Journal of Radiation Oncology Biology Physics, 2009, 75, 782-790.	0.4	47
63	Impaired recognition of body expressions in the behavioral variant of frontotemporal dementia. Neuropsychologia, 2015, 75, 496-504.	0.7	47
64	Simultaneous segmentation and anatomical labeling of the cerebral vasculature. Medical Image Analysis, 2016, 32, 201-215.	7.0	46
65	Diffusion-weighted versus volumetric imaging of the striatum in early symptomatic Huntington disease. Journal of Neurology, 2009, 256, 109-114.	1.8	45
66	Nonrigid Image Registration Using Free-Form Deformations with a Local Rigidity Constraint. Lecture Notes in Computer Science, 2004, , 639-646.	1.0	45
67	Improved Visualization of Coronary Arteries Using a New Three-Dimensional Submillimeter MR Coronary Angiography Sequence with Balanced Gradients. American Journal of Roentgenology, 2002, 179, 901-910.	1.0	44
68	High-speed digital imaging method for ciliary beat frequency measurement. Journal of Pharmacy and Pharmacology, 2010, 57, 521-526.	1.2	44
69	Intrafractional prostate motion during online image guided intensity-modulated radiotherapy for prostate cancer. Radiotherapy and Oncology, 2011, 98, 181-186.	0.3	42
70	Unsupervised Segmentation, Clustering, and Groupwise Registration of Heterogeneous Populations of Brain MR Images. IEEE Transactions on Medical Imaging, 2014, 33, 201-224.	5.4	39
71	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.	1.0	37
72	Track Orientation Density Imaging (TODI) and Track Orientation Distribution (TOD) based tractography. NeuroImage, 2014, 94, 312-336.	2.1	37

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73	Evaluation of tissue displacement and regional strain in the Achilles tendon using quantitative high-frequency ultrasound. PLoS ONE, 2017, 12, e0181364.	1.1	36
74	Temporal subtraction of thorax CR images using statistical deformation model. IEEE Transactions on Medical Imaging, 2003, 22, 1490-1504.	5.4	35
75	Construction and Validation of Mean Shape Atlas Templates for Atlas-Based Brain Image Segmentation. Lecture Notes in Computer Science, 2005, 19, 689-700.	1.0	35
76	Adenosine-induced ventricular asystole or rapid ventricular pacing to enhance three-dimensional rotational imaging during cardiac ablation procedures. Europace, 2009, 11, 751-762.	0.7	35
77	An information theoretic approach for non-rigid image registration using voxel class probabilities. Medical Image Analysis, 2006, 10, 413-431.	7.0	34
78	Semi-automated brain tumor segmentation on multi-parametric MRI using regularized non-negative matrix factorization. BMC Medical Imaging, 2017, 17, 29.	1.4	34
79	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.	2.1	33
80	3D volumetric displacement and strain analysis of composite polymerization. Dental Materials, 2015, 31, 453-461.	1.6	33
81	Application of a new image analysis technique to study brain asymmetry in schizophrenia. Psychiatry Research - Neuroimaging, 2003, 124, 25-35.	0.9	32
82	T2 Mapping of Human Femorotibial Cartilage with Turbo Mixed MR Imaging at 1.5 T: Feasibility. Radiology, 2004, 233, 609-614.	3.6	32
83	Metabolic and Type 1 cannabinoid receptor imaging of a transgenic rat model in the early phase of Huntington disease. Experimental Neurology, 2011, 229, 440-449.	2.0	32
84	Early decrease of type 1 cannabinoid receptor binding and phosphodiesterase 10A activity inÂvivo in R6/2 Huntington mice. Neurobiology of Aging, 2014, 35, 2858-2869.	1.5	32
85	Two Time Point MS Lesion Segmentation in Brain MRI: An Expectation-Maximization Framework. Frontiers in Neuroscience, 2016, 10, 576.	1.4	32
86	Accuracy of magnetic resonance imaging for measuring fetal sheep lungs and other organs. Ultrasound in Obstetrics and Gynecology, 2005, 25, 270-276.	0.9	30
87	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, 1688-1697.	0.7	30
88	Hierarchical non-negative matrix factorization to characterize brain tumor heterogeneity using multi-parametric MRI. NMR in Biomedicine, 2015, 28, 1599-1624.	1.6	29
89	A spectroscopic study of the chromatic properties of GafChromicâ„¢EBT3 films. Medical Physics, 2016, 43, 1156-1166.	1.6	29
90	Evaluation of manual vs semi-automated delineation of liver lesions on CT images. European Radiology, 1997, 7, 432-438.	2.3	27

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91	Patch-Based Super-Resolution of MR Spectroscopic Images: Application to Multiple Sclerosis. Frontiers in Neuroscience, 2017, 11, 13.	1.4	27
92	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.	1.0	26
93	The EASI project-improving the effectiveness and quality of image-guided surgery. IEEE Transactions on Information Technology in Biomedicine, 1998, 2, 156-168.	3.6	25
94	Automatic 3-D Breath-Hold Related Motion Correction of Dynamic Multislice MRI. IEEE Transactions on Medical Imaging, 2010, 29, 868-878.	5.4	25
95	Feature-based statistical analysis of structural MR data for automatic detection of focal cortical dysplastic lesions. NeuroImage, 2005, 27, 253-266.	2.1	23
96	Segmentation of Trabecular Jaw Bone on Cone Beam <scp>CT</scp> Datasets. Clinical Implant Dentistry and Related Research, 2015, 17, 1082-1091.	1.6	23
97	Optimal 68Ga-PSMA and 18F-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.	3.3	23
98	Fast, accurate, and robust automatic marker detection for motion correction based on oblique kV or MV projection image pairs. Medical Physics, 2010, 37, 1554-1564.	1.6	22
99	Classifying Glioblastoma Multiforme Follow-Up Progressive vs. Responsive Forms Using Multi-Parametric MRI Features. Frontiers in Neuroscience, 2016, 10, 615.	1.4	22
100	Deep learning for elective neck delineation: More consistent and time efficient. Radiotherapy and Oncology, 2020, 153, 180-188.	0.3	21
101	Artificial intelligence and its impact on quality improvement in upper and lower gastrointestinal endoscopy. Digestive Endoscopy, 2021, 33, 242-253.	1.3	21
102	Image Based Musculoskeletal Modeling Allows Personalized Biomechanical Analysis of Gait. Lecture Notes in Computer Science, 2006, , 58-66.	1.0	21
103	Effects of Immediate and Delayed Loading on Peri‐Implant Trabecular Structures: A Cone Beam <scp>CT</scp> Evaluation. Clinical Implant Dentistry and Related Research, 2014, 16, 873-883.	1.6	20
104	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.	1.6	19
105	Modeling the dose dependence of the vis-absorption spectrum of EBT3 GafChromic™ films. Medical Physics, 2017, 44, 2532-2543.	1.6	19
106	icobrain ms 5.1: Combining unsupervised and supervised approaches for improving the detection of multiple sclerosis lesions. NeuroImage: Clinical, 2021, 31, 102707.	1.4	19
107	Clinical validation of high-resolution fast spin-echo MR colonography after colon distention with air. Journal of Magnetic Resonance Imaging, 2005, 22, 400-405.	1.9	18
108	Image-based in vivo assessment of targeting accuracy of stereotactic brain surgery in experimental rodent models. Scientific Reports, 2016, 6, 38058.	1.6	18

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109	Convexity-constrained and nonnegativity-constrained spherical factorization in diffusion-weighted imaging. NeuroImage, 2017, 146, 507-517.	2.1	18
110	Quantification of Cerebral Grey and White Matter Asymmetry from MRI. Lecture Notes in Computer Science, 1999, , 348-357.	1.0	18
111	Image registration using mutual information. , 2015, , 295-308.		18
112	Non-rigid Image Registration Using a Statistical Spline Deformation Model. Lecture Notes in Computer Science, 2003, 18, 463-474.	1.0	18
113	Magnetization transfer analysis of cartilage repair tissue: a preliminary study. Skeletal Radiology, 2006, 35, 903-908.	1.2	17
114	Endothelial Msx1 transduces hemodynamic changes into an arteriogenic remodeling response. Journal of Cell Biology, 2015, 210, 1239-1256.	2.3	17
115	Nonrigid Registration for Subtraction CT Angiography Applied to the Carotids and Cranial Arteries. Academic Radiology, 2007, 14, 1562-1576.	1.3	16
116	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. Cardiovascular Research, 2011, 89, 166-174.	1.8	16
117	Optimized preoperative motor cortex mapping in brain tumors using advanced processing of transcranial magnetic stimulation data. NeuroImage: Clinical, 2019, 21, 101657.	1.4	16
118	Artificial Intelligence Based Patient-Specific Preoperative Planning Algorithm for Total Knee Arthroplasty. Frontiers in Robotics and AI, 2022, 9, 840282.	2.0	16
119	Combined T1-T2 mapping of human femoro-tibial cartilage with turbo-mixed imaging at 1.5T. Journal of Magnetic Resonance Imaging, 2005, 22, 368-372.	1.9	15
120	Linear normalization of MR brain images in pediatric patients with periventricular leukomalacia. NeuroImage, 2007, 35, 686-697.	2.1	15
121	Cross-Modal Distillation to Improve MRI-Based Brain Tumor Segmentation With Missing MRI Sequences. IEEE Transactions on Biomedical Engineering, 2022, 69, 2153-2164.	2.5	15
122	<title>Automatic 3D segmentation of internal structures of the head in MR images using a combination of similarity and free-form transformations</title>. , 1998, , .		14
123	Retrospective correction of the heel effect in hand radiographs. Medical Image Analysis, 2002, 6, 183-190.	7.0	14
124	Nonrigid Image Registration Using Conditional Mutual Information. , 2007, 20, 725-737.		14
125	A semi-automated 2D/3D marker-based registration algorithm modelling prostate shrinkage during radiotherapy for prostate cancer. Radiotherapy and Oncology, 2009, 90, 331-336.	0.3	13
126	Online adaptation and verification of VMAT. Medical Physics, 2015, 42, 3877-3891.	1.6	13

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127	68Ga-PSMA-11 PET, 18F-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.	1.1	13
128	Automated Segmentation of MS Lesions from Multi-channel MR Images. Lecture Notes in Computer Science, 1999, , 11-21.	1.0	13
129	Feasibility and Advantages of Diffusion Weighted Imaging Atlas Construction in Q-Space. Lecture Notes in Computer Science, 2011, 14, 166-173.	1.0	13
130	Automatic segmentation of brain tissues and MR bias field correction using a digital brain atlas. Lecture Notes in Computer Science, 1998, , 1222-1229.	1.0	12
131	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.	1.0	12
132	Dosimetric adaptive IMRT driven by fiducial points. Medical Physics, 2014, 41, 061716.	1.6	12
133	Robust motion correction for cardiac T1 and ECV mapping using a T1 relaxation model approach. Medical Image Analysis, 2019, 52, 212-227.	7.0	12
134	Resorption of retromolar bone grafts after alveolar ridge augmentationâ€"volumetric changes after 12â€‰months assessed by CBCT analysis. International Journal of Implant Dentistry, 2021, 7, 7.	1.1	11
135	The successive projection algorithm as an initialization method for brain tumor segmentation using non-negative matrix factorization. PLoS ONE, 2017, 12, e0180268.	1.1	11
136	Computer-Aided Detection of Colonic Polyps Using Low-Dose CT Acquisitions. Academic Radiology, 2006, 13, 1062-1071.	1.3	10
137	Non-rigid brain image registration using a statistical deformation model. , 2006, , .		10
138	Biomechanically Based Elastic Breast Registration Using Mass Tensor Simulation. Lecture Notes in Computer Science, 2006, 9, 718-725.	1.0	10
139	Closed-chest animal model of chronic coronary artery stenosis. Assessment with magnetic resonance imaging. International Journal of Cardiovascular Imaging, 2010, 26, 299-308.	0.7	10
140	Pitfalls in training and validation of deep learning systems. Bailliere's Best Practice and Research in Clinical Gastroenterology, 2021, 52-53, 101712.	1.0	10
141	Atlas-to-Image Non-rigid Registration by Minimization of Conditional Local Entropy. Lecture Notes in Computer Science, 2007, 20, 320-332.	1.0	10
142	Image segmentation using local shape and gray-level appearance models. , 2006, , .		9
143	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.	1.0	9
144	Real-time unblinding for validation of a new CADe tool for colorectal polyp detection. Gut, 2021, 70, 641-643.	6.1	9

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145	Prospective Natural History Study in 24 Adult Patients With LGMDR12 Over 2 Years of Follow-up. Neurology, 2022, 99, .	1.5	9
146	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.	1.0	8
147	Parameter Optimisation of a Linear Tetrahedral Mass Tensor Model for a Maxillofacial Soft Tissue Simulator. Lecture Notes in Computer Science, 2006, , 159-168.	1.0	8
148	An iterative dual energy CT reconstruction method for a K-edge contrast material. Proceedings of SPIE, 2011, , .	0.8	7
149	3D Tendon Strain Estimation Using High-frequency Volumetric Ultrasound Images: A Feasibility Study. Ultrasonic Imaging, 2018, 40, 67-83.	1.4	7
150	Simultaneous Segmentation and Anatomical Labeling of the Cerebral Vasculature. Lecture Notes in Computer Science, 2014, 17, 307-314.	1.0	7
151	Fiber Bundle Segmentation Using Spectral Embedding and Supervised Learning. Mathematics and Visualization, 2014, , 103-114.	0.4	7
152	Adaptive Boundary Conditions for Physically Based Follow-Up Breast MR Image Registration. Lecture Notes in Computer Science, 2008, 11, 839-846.	1.0	7
153	Treatment plan prediction for lung IMRT using deep learning based fluence map generation. Physica Medica, 2022, 99, 44-54.	0.4	7
154	Non-rigid registration with position dependent rigidity for whole body PET follow-up studies. , 2006, , .		6
155	Tumour Relapse Prediction Using Multiparametric MR Data Recorded during Follow-Up of GBM Patients. BioMed Research International, 2015, 2015, 1-13.	0.9	6
156	ISLES Challenge 2015: Automated Model-Based Segmentation of Ischemic Stroke in MR Images. Lecture Notes in Computer Science, 2016, , 246-253.	1.0	6
157	Multi-phase rotational angiography of the left ventricle to assist ablations: feasibility and accuracy of novel imaging. European Heart Journal Cardiovascular Imaging, 2016, 17, 162-168.	0.5	6
158	The Role of Medical Image Computing and Machine Learning in Healthcare. , 2019, , 9-23.		6
159	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.	1.3	6
160	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.	1.0	6
161	Model-Based Segmentation Using Graph Representations. Lecture Notes in Computer Science, 2008, 11, 393-400.	1.0	6
162	Plaque and Stent Artifact Reduction in Subtraction CT Angiography Using Nonrigid Registration and a Volume Penalty. Lecture Notes in Computer Science, 2005, 8, 361-368.	1.0	6

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163	Evaluation of a Novel Calibration Technique for Optically Tracked Oblique Laparoscopes. Lecture Notes in Computer Science, 2007, 10, 467-474.	1.0	6
164	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.	1.7	5
165	SPARC: Unified framework for automatic segmentation, probabilistic atlas construction, registration and clustering of brain MR images. , 2010, , .		5
166	Anatomical Labeling of the Circle of Willis Using Maximum A Posteriori Graph Matching. Lecture Notes in Computer Science, 2013, 16, 566-573.	1.0	5
167	A Semi-Automated Segmentation Framework for MRI Based Brain Tumor Segmentation Using Regularized Nonnegative Matrix Factorization. , 2016, , .		5
168	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.	3.9	5
169	Shape Constrained CNN for Cardiac MR Segmentation with Simultaneous Prediction of Shape and Pose Parameters. Lecture Notes in Computer Science, 2021, , 127-136.	1.0	5
170	A Statistical Framework for Partial Volume Segmentation. Lecture Notes in Computer Science, 2001, , 204-212.	1.0	5
171	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.	1.0	5
172	TH-E-BRB-03: Incorporating a Lateral Scan Effect Correction in a EBT3 Calibration Protocol. Medical Physics, 2012, 39, 4009-4009.	1.6	5
173	Incorporating novel image processing methods in a hospital-wide PACS. International Congress Series, 2005, 1281, 1016-1021.	0.2	4
174	Pre-operative simulation and post-operative validation of soft-tissue deformations for breast implantation planning. , 2006, 6141, 295.		4
175	Motion and deformation estimation of cardiac ultrasound sequences using an anatomical B-spline transformation model. , 2012, , .		4
176	Potential benefits of dosimetric VMAT tracking verified with 3D film measurements. Medical Physics, 2016, 43, 2162-2173.	1.6	4
177	Unsupervised Framework for Consistent Longitudinal MS Lesion Segmentation. Lecture Notes in Computer Science, 2017, , 208-219.	1.0	4
178	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.	0.5	4
179	Nonrigid Registration of Multitemporal CT and MR Images for Radiotherapy Treatment Planning. Lecture Notes in Computer Science, 2006, , 297-305.	1.0	4
180	Computer-aided interactive object delineation using an intelligent paintbrush technique. , 0, , 77-83.		4

#	Article	IF	Citations
181	Temporal Subtraction of Thorax CR Images. Lecture Notes in Computer Science, 2003, , 738-745.	1.0	3
182	Removal of Plaque and Stent Artifacts in Subtraction CT Angiography Using Nonrigid Registration and a Volume Penalty. , 2005, 2005, 4294-7.		3
183	Changes in Left Atrial and Pulmonary Venous Anatomy During Respiration. Circulation, 2007, 115, e617-9.	1.6	3
184	A statistical framework for the registration of 3D knee implant components to single-plane X-ray images. , 2008, , .		3
185	The minimal entropy prior for simultaneous reconstruction and segmentation of in vivo microct trabecular bone images. , 2009, , .		3
186	Impact of RF inhomogeneity correction on image registration of micro MRI rodent brain images. , 2011, , .		3
187	Left ventricular four-dimensional rotational angiography with low radiation dose through interphase registration. Europace, 2015, 17, 152-159.	0.7	3
188	Patch based super-resolution of MR spectroscopic images. , 2016, , .		3
189	Preprocessing of Heteroscedastic Medical Images. IEEE Access, 2018, 6, 26047-26058.	2.6	3
190	Sa2012 AUTOMATED POLYP SIZE ESTIMATION WITH DEEP LEARNING REDUCES INTEROBSERVER VARIABILITY. Gastrointestinal Endoscopy, 2020, 91, AB241-AB242.	0.5	3
191	On the Relationship Between Calibrated Predictors and Unbiased Volume Estimation. Lecture Notes in Computer Science, 2021, , 678-688.	1.0	3
192	Atlas-Guided Global Tractography: Imposing a Prior on the Local Track Orientation. Mathematics and Visualization, 2014, , 115-123.	0.4	3
193	A Voxel-Wise, Cascaded Classification Approach to Ischemic Stroke Lesion Segmentation. Lecture Notes in Computer Science, 2016, , 254-265.	1.0	3
194	Retrospective heel effect correction in conventional radiography. , 0, , .		2
195	3D soft tissue predictions with a tetrahedral mass tensor model for a maxillofacial planning system: a quantitative validation study. , 2006, , .		2
196	Large-scale validation of non-rigid registration algorithms for atlas-based brain image segmentation. , 2006, , .		2
197	P4A-5 3D Cardiac Strain Estimation Using Spatio-Temporal Elastic Registration: In Silico Validation. , 2007, , .		2
198	Spatiotemporal non-rigid image registration for 3D ultrasound cardiac motion estimation. , 2007, , .		2

#	Article	IF	Citations
199	3D cardiac strain estimation using spatio-temporal elastic registration: In-vivo application. , 2008, , .		2
200	Estimation of 3D cardiac deformation using spatio-temporal elastic registration of non-scanconverted ultrasound data. , 2008, , .		2
201	Registration-based filtering: An acceptable tool for noise reduction in left ventricular dynamic rotational angiography images?. Proceedings of SPIE, 2014, , .	0.8	2
202	An untrained and unsupervised method for MRI brain tumor segmentation. , 2016, , .		2
203	Imaging Ischemic and Reperfusion Injury in Acute Myocardial Infarction. JACC: Cardiovascular Imaging, 2017, 10, 1520-1523.	2.3	2
204	Tu1959 BLI AND LCI IMPROVE POLYP DETECTION AND DELINEATION ACCURACY FOR DEEP LEARNING NETWORKS. Gastrointestinal Endoscopy, 2019, 89, AB632.	0.5	2
205	Feasibility of CT-Only 3D Dose Prediction for VMAT Prostate Plans Using Deep Learning. Lecture Notes in Computer Science, 2019, , 10-17.	1.0	2
206	Left Ventricular Parameter Regression from Deep Feature Maps of a Jointly Trained Segmentation CNN. Lecture Notes in Computer Science, 2020, , 395-404.	1.0	2
207	Groupwise Deformable Registration of Fiber Track Sets Using Track Orientation Distributions. Mathematics and Visualization, 2014, , 151-161.	0.4	2
208	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.	1.0	2
209	SUâ€£â€‡â€497: Initial Characterization of a Novel 2D Computed Radiography (CR) Dosimeter for SBRT. Medical Physics, 2015, 42, 3449-3449.	1.6	2
210	Effects of Anatomical Asymmetry in Spatial Priors on Model-Based Segmentation of the Brain MRI: A Validation Study. Lecture Notes in Computer Science, 2004, , 327-334.	1.0	2
211	Intra-patient Non-rigid Registration of 3D Vascular Cerebral Images. Lecture Notes in Computer Science, 2013, , 106-113.	1.0	2
212	Voxel based nonrigid image registration using local and partial volume similarity measures. , 2010, , .		1
213	Three-dimensional myocardial strain estimation from volumetric ultrasound data using a novel transformation model adapted to the heart. , 2012, , .		1
214	An automated pipeline for regional cardiac strain estimation from volumetric ultrasound data. , 2013, , .		1
215	Perfusion Paths: Inference of Voxelwise Blood Flow Trajectories in CT Perfusion. Lecture Notes in Computer Science, 2015, , 407-414.	1.0	1
216	Convolutional LSTM. , 2021, , 121-126.		1

#	Article	IF	Citations
217	LGMD. Neuromuscular Disorders, 2021, 31, S106.	0.3	1
218	An Augmented Reality Approach Using Pre-operative Patient Specific Images to Guide Thermo-Ablation Procedures. Lecture Notes in Computer Science, 2003, , 244-252.	1.0	1
219	An Elasticity Penalty: Mixing FEM and Nonrigid Registration. IFMBE Proceedings, 2009, , 709-712.	0.2	1
220	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.	1.0	1
221	3D Left Ventricular Segmentation from 2D Cardiac MR Images Using Spatial Context. Lecture Notes in Computer Science, 2020, , 90-99.	1.0	1
222	Computerized medical image interpretation.. Dentomaxillofacial Radiology, 1995, 24, 75-80.	1.3	0
223	Visualizing electrocardiographic information on a patient specific model of the heart. , 2003, 5029, 138.		0
224	Feature-based statistical analysis of structural MR data for automatic detection of focal cortical dysplastic (FCD) lesions. , 0, , .		0
225	Catheter based calibration for augmented reality guidance of cardiac thermo-ablation procedures. , 2005, , .		0
226	Model-Based Brain Tissue Classification. , 2005, , 1-55.		0
227	Subtraction CT angiography using non-rigid registration: The impact of similarity measure and image pre-processing. International Congress Series, 2005, 1281, 328-333.	0.2	0
228	Non-rigid image registration using mutual information. , 2006, , 91-103.		0
229	Visual enhancement of interval changes using a temporal subtraction technique. , 2007, , .		0
230	Validation of nonrigid registration for multi-tracer PET-CT treatment planning in rectal cancer radiotherapy. , 2009, , .		0
231	Anatomical Markov prior-based multimodality image registration. , 2011, , .		0
232	Assessment of variability in cerebral vasculature for neuro-anatomical surgery planning in rodent brain. Proceedings of SPIE, 2011, , .	0.8	0
233	Probabilistic framework for subject-specific and population-based analysis of longitudinal changes and disease progression in brain MR images. Proceedings of SPIE, 2011, , .	0.8	0
234	Inferring brain deformation during open neurosurgery using CBCT angiography. , 2016, , .		0

#	Article	IF	Citations
235	SP-0448: Radiomics â€" How does artificial intelligence shape the future of medical imaging?. Radiotherapy and Oncology, 2018, 127, S233.	0.3	0
236	PO-0723 Benefits of deep learning for delineation of organs at risk in head and neck cancer. Radiotherapy and Oncology, 2019, 133, S371.	0.3	0
237	879 A PROSPECTIVE MULTI-CENTER VALIDATION STUDY FOR AUTOMATED POLYP DETECTION AS A SECOND OBSERVER. Gastrointestinal Endoscopy, 2020, 91, AB72.	0.5	0
238	Improving T1w MRI-based brain tumor segmentation using cross-modal distillation. , 2021, , .		0
239	Validation of Nonlinear Spatial Filtering to Improve Tissue Segmentation of MR Brain Images. Lecture Notes in Computer Science, 2001, , 507-515.	1.0	0
240	Quantitative MR Imaging. Medical Radiology, 2001, , 47-64.	0.0	0
241	SU-DD-A4-01: Nonrigid Registration of Mesorectal Region for PET Signal Follow-Up During Radiation Therapy. Medical Physics, 2007, 34, 2326-2326.	1.6	0
242	SUâ€Eâ€Tâ€44: A Microâ€Raman Spectroscopy Study of the Doseâ€Dependence of EBT3 GafChromicTM Films for Quantifying the Degree of Molecular Polymerization. Medical Physics, 2015, 42, 3340-3341.	1.6	0
243	White Matter Fiber-Bundle Analysis Using Non-negative Tensor Factorization. Lecture Notes in Computer Science, 2016, , 650-657.	1.0	0
244	Robust Model-Based Registration of Cardiac MR Images for T1 and ECV Mapping. Lecture Notes in Computer Science, 2017, , 42-50.	1.0	0
245	Learning from Mistakes: An Error-Driven Mechanism to Improve Segmentation Performance Based on Expert Feedback. Lecture Notes in Computer Science, 2021, , 68-77.	1.0	0