Simon Keith Warfield

List of Publications by Year in descending order

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431 papers

24,597 citations

71
h-index

9839

438 all docs

438 docs citations

times ranked

438

20796 citing authors

g-index

#	Article	IF	Citations
1	Simultaneous Truth and Performance Level Estimation (STAPLE): An Algorithm for the Validation of Image Segmentation. IEEE Transactions on Medical Imaging, 2004, 23, 903-921.	5.4	1,604
2	Statistical validation of image segmentation quality based on a spatial overlap index1. Academic Radiology, 2004, 11, 178-189.	1.3	1,363
3	Abnormal Cerebral Structure Is Present at Term in Premature Infants. Pediatrics, 2005, 115, 286-294.	1.0	775
4	Early Experience Alters Brain Function and Structure. Pediatrics, 2004, 113, 846-857.	1.0	735
5	Quantitative magnetic resonance imaging of brain development in premature and mature newborns. Annals of Neurology, 1998, 43, 224-235.	2.8	596
6	Improved Watershed Transform for Medical Image Segmentation Using Prior Information. IEEE Transactions on Medical Imaging, 2004, 23, 447-458.	5.4	594
7	Periventricular white matter injury in the premature infant is followed by reduced cerebral cortical gray matter volume at term. Annals of Neurology, 1999, 46, 755-760.	2.8	506
8	Automated Segmentation of MR Images of Brain Tumors. Radiology, 2001, 218, 586-591.	3.6	432
9	Primary cortical folding in the human newborn: an early marker of later functional development. Brain, 2008, 131, 2028-2041.	3.7	409
10	Early Alteration of Structural and Functional Brain Development in Premature Infants Born with Intrauterine Growth Restriction. Pediatric Research, 2004, 56, 132-138.	1.1	402
11	Serial Intraoperative Magnetic Resonance Imaging of Brain Shift. Neurosurgery, 2001, 48, 787-798.	0.6	367
12	Late Gestation Cerebellar Growth Is Rapid and Impeded by Premature Birth. Pediatrics, 2005, 115, 688-695.	1.0	353
13	Impaired Cerebral Cortical Gray Matter Growth After Treatment With Dexamethasone for Neonatal Chronic Lung Disease. Pediatrics, 2001, 107, 217-221.	1.0	351
14	Deep learning with noisy labels: Exploring techniques and remedies in medical image analysis. Medical Image Analysis, 2020, 65, 101759.	7.0	320
15	Realistic simulation of the 3-D growth of brain tumors in MR images coupling diffusion with biomechanical deformation. IEEE Transactions on Medical Imaging, 2005, 24, 1334-1346.	5. 4	299
16	Standardized evaluation methodology and reference database for evaluating coronary artery centerline extraction algorithms. Medical Image Analysis, 2009, 13, 701-714.	7.0	295
17	Serial Intraoperative Magnetic Resonance Imaging of Brain Shift. Neurosurgery, 2001, 48, 787-798.	0.6	278
18	Robust Super-Resolution Volume Reconstruction From Slice Acquisitions: Application to Fetal Brain MRI. IEEE Transactions on Medical Imaging, 2010, 29, 1739-1758.	5 . 4	275

#	Article	IF	CITATIONS
19	Perinatal risk factors altering regional brain structure in the preterm infant. Brain, 2007, 130, 667-677.	3.7	274
20	Registration of 3-d intraoperative MR images of the brain using a finite-element biomechanical model. IEEE Transactions on Medical Imaging, 2001, 20, 1384-1397.	5 . 4	261
21	A normative spatiotemporal MRI atlas of the fetal brain for automatic segmentation and analysis of early brain growth. Scientific Reports, 2017, 7, 476.	1.6	217
22	Comparison of fiber tracts derived from in-vivo DTI tractography with 3D histological neural tract tracer reconstruction on a macaque brain. Neurolmage, 2007, 37, 530-538.	2.1	216
23	Longitudinal multiple sclerosis lesion segmentation: Resource and challenge. NeuroImage, 2017, 148, 77-102.	2.1	215
24	Robust nonrigid registration to capture brain shift from intraoperative MRI. IEEE Transactions on Medical Imaging, 2005, 24, 1417-1427.	5.4	214
25	Regional Magnetic Resonance Imaging Lesion Burden and Cognitive Function in Multiple Sclerosis. Archives of Neurology, 2001, 58, 115-21.	4.9	202
26	Evaluation of three-dimensional finite element-based deformable registration of pre- and intraoperative prostate imaging. Medical Physics, 2001, 28, 2551-2560.	1.6	201
27	Impaired Trophic Interactions Between the Cerebellum and the Cerebrum Among Preterm Infants. Pediatrics, 2005, 116, 844-850.	1.0	200
28	Patient-specific model of brain deformation: Application to medical image registration. Journal of Biomechanics, 2007, 40, 919-929.	0.9	189
29	Intrauterine Growth Restriction Affects the Preterm Infant's Hippocampus. Pediatric Research, 2008, 63, 438-443.	1.1	187
30	Automatic segmentation of newborn brain MRI. Neurolmage, 2009, 47, 564-572.	2.1	185
31	Serial registration of intraoperative MR images of the brain. Medical Image Analysis, 2002, 6, 337-359.	7.0	184
32	Non-rigid alignment of pre-operative MRI, fMRI, and DT-MRI with intra-operative MRI for enhanced visualization and navigation in image-guided neurosurgery. Neurolmage, 2007, 35, 609-624.	2.1	180
33	Objective Evaluation of Multiple Sclerosis Lesion Segmentation using a Data Management and Processing Infrastructure. Scientific Reports, 2018, 8, 13650.	1.6	171
34	Automatic Segmentation and Quantitative Analysis of the Articular Cartilages From Magnetic Resonance Images of the Knee. IEEE Transactions on Medical Imaging, 2010, 29, 55-64.	5.4	158
35	Brain functional networks in syndromic and non-syndromic autism: a graph theoretical study of EEG connectivity. BMC Medicine, 2013, 11, 54.	2.3	149
36	Automatic identification of gray matter structures from MRI to improve the segmentation of white matter lesions. Journal of Image Guided Surgery, 1995, 1, 326-338.	0.4	146

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37	EEG source analysis of epileptiform activity using a 1Âmm anisotropic hexahedra finite element head model. Neurolmage, 2009, 44, 399-410.	2.1	145
38	A collaborative resource to build consensus for automated left ventricular segmentation of cardiac MR images. Medical Image Analysis, 2014, 18, 50-62.	7.0	143
39	Neonate hippocampal volumes: Prematurity, perinatal predictors, and 2â€year outcome. Annals of Neurology, 2008, 63, 642-651.	2.8	142
40	Volumetric MRI Study of Brain in Children With Intrauterine Exposure to Cocaine, Alcohol, Tobacco, and Marijuana. Pediatrics, 2008, 121, 741-750.	1.0	140
41	Quantitative in vivo MRI measurement of cortical development in the fetus. Brain Structure and Function, 2012, 217, 127-139.	1.2	140
42	Regional Brain Development in Serial Magnetic Resonance Imaging of Low-Risk Preterm Infants. Pediatrics, 2006, 118, 23-33.	1.0	139
43	Morphological Characteristics of Brain Tumors Causing Seizures. Archives of Neurology, 2010, 67, 336-42.	4.9	139
44	An Automated Registration Algorithm for Measuring MRI Subcortical Brain Structures. Neurolmage, 1997, 6, 13-25.	2.1	134
45	Nonrigid registration of 3D tensor medical data. Medical Image Analysis, 2002, 6, 143-161.	7.0	131
46	Reduction in Cerebellar Volumes in Preterm Infants: Relationship to White Matter Injury and Neurodevelopment at Two Years of Age. Pediatric Research, 2006, 60, 97-102.	1.1	130
47	A unified framework for clustering and quantitative analysis of white matter fiber tracts. Medical Image Analysis, 2008, 12, 191-202.	7.0	122
48	Asymmetric Loss Functions and Deep Densely-Connected Networks for Highly-Imbalanced Medical Image Segmentation: Application to Multiple Sclerosis Lesion Detection. IEEE Access, 2019, 7, 1721-1735.	2.6	120
49	Quantitative analysis of MRI signal abnormalities of brain white matter with high reproducibility and accuracy. Journal of Magnetic Resonance Imaging, 2002, 15, 203-209.	1.9	118
50	Automated segmentation of multiple sclerosis lesion subtypes with multichannel MRI. NeuroImage, 2006, 32, 1205-1215.	2.1	115
51	Loss of White Matter Microstructural Integrity Is Associated with Adverse Neurological Outcome in Tuberous Sclerosis Complex. Academic Radiology, 2012, 19, 17-25.	1.3	111
52	Characterization of the corpus callosum in very preterm and full-term infants utilizing MRI. NeuroImage, 2011, 55, 479-490.	2.1	108
53	Super-resolution reconstruction to increase the spatial resolution of diffusion weighted images from orthogonal anisotropic acquisitions. Medical Image Analysis, 2012, 16, 1465-1476.	7.0	106
54	Fetal Neuropathology in Zika Virus-Infected Pregnant Female Rhesus Monkeys. Cell, 2018, 173, 1111-1122.e10.	13.5	104

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55	Regional white matter microstructure in very preterm infants: Predictors and 7 year outcomes. Cortex, 2014, 52, 60-74.	1.1	101
56	Corpus callosum alterations in very preterm infants: Perinatal correlates and 2year neurodevelopmental outcomes. NeuroImage, 2012, 59, 3571-3581.	2.1	98
57	Three validation metrics for automated probabilistic image segmentation of brain tumours. Statistics in Medicine, 2004, 23, 1259-1282.	0.8	96
58	Quantity and distribution of levator ani stretch during simulated vaginal childbirth. American Journal of Obstetrics and Gynecology, 2008, 199, 198.e1-198.e5.	0.7	96
59	Automatic segmentation of the bone and extraction of the bone–cartilage interface from magnetic resonance images of the knee. Physics in Medicine and Biology, 2007, 52, 1617-1631.	1.6	94
60	Near-infrared spectroscopy versus magnetic resonance imaging to study brain perfusion in newborns with hypoxic–ischemic encephalopathy treated with hypothermia. NeuroImage, 2014, 85, 287-293.	2.1	93
61	Reproducibility of Functional MR Imaging: Preliminary Results of Prospective Multi-institutional Study Performed by Biomedical Informatics Research Network. Radiology, 2005, 237, 781-789.	3.6	92
62	Real-time registration of volumetric brain MRI by biomechanical simulation of deformation during image guided neurosurgery. Computing and Visualization in Science, 2002, 5, 3-11.	1.2	91
63	Characterizing brain tissue by assessment of the distribution of anisotropic microstructural environments in diffusionâ€compartment imaging (DIAMOND). Magnetic Resonance in Medicine, 2016, 76, 963-977.	1.9	90
64	Presentation and Diagnosis of Tuberous Sclerosis Complex in Infants. Pediatrics, 2017, 140, .	1.0	90
65	Levator ani thickness variations in symptomatic and asymptomatic women using magnetic resonance-based 3-dimensional color mapping. American Journal of Obstetrics and Gynecology, 2004, 191, 856-861.	0.7	87
66	Quantitative follow-up of patients with multiple sclerosis using MRI: Reproducibility. Journal of Magnetic Resonance Imaging, 1999, 9, 509-518.	1.9	83
67	A Validation Framework for Brain Tumor Segmentation. Academic Radiology, 2007, 14, 1242-1251.	1.3	83
68	Fetal brain growth portrayed by a spatiotemporal diffusion tensor MRI atlas computed from in utero images. Neurolmage, 2019, 185, 593-608.	2.1	81
69	Fetal MRI: A technical update with educational aspirations. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2014, 43, 237-266.	0.2	78
70	Capturing intraoperative deformations: research experience at Brigham and Women's hospital. Medical Image Analysis, 2005, 9, 145-162.	7.0	75
71	A high performance computing approach to the registration of medical imaging data. Parallel Computing, 1998, 24, 1345-1368.	1.3	74
72	Diffusion Tensor Magnetic Resonance Imaging in Multiple Sclerosis. Journal of Neuroimaging, 2005, 15, 68S-81S.	1.0	74

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73	Patient-specific non-linear finite element modelling for predicting soft organ deformation in real-time; Application to non-rigid neuroimage registration. Progress in Biophysics and Molecular Biology, 2010, 103, 292-303.	1.4	74
74	Multi-atlas multi-shape segmentation of fetal brain MRI for volumetric and morphometric analysis of ventriculomegaly. NeuroImage, 2012, 60, 1819-1831.	2.1	74
75	A new neonatal cortical and subcortical brain atlas: the Melbourne Children's Regional Infant Brain (M-CRIB) atlas. NeuroImage, 2017, 147, 841-851.	2.1	74
76	Prefrontal cortical thickness in first-episode psychosis: a magnetic resonance imaging study. Biological Psychiatry, 2004, 55, 131-140.	0.7	73
77	Fast k-NN classification for multichannel image data. Pattern Recognition Letters, 1996, 17, 713-721.	2.6	72
78	Impaired Language Pathways in Tuberous Sclerosis Complex Patients with Autism Spectrum Disorders. Cerebral Cortex, 2013, 23, 1526-1532.	1.6	72
79	Accrual of MRI white matter abnormalities in elderly with normal and impaired mobility. Journal of the Neurological Sciences, 2005, 232, 23-27.	0.3	70
80	Transfer learning in medical image segmentation: New insights from analysis of the dynamics of model parameters and learned representations. Artificial Intelligence in Medicine, 2021, 116, 102078.	3.8	66
81	An MRI study of age-related white and gray matter volume changes in the rhesus monkey. Neurobiology of Aging, 2008, 29, 1563-1575.	1.5	65
82	Parametric Representation of Multiple White Matter Fascicles from Cube and Sphere Diffusion MRI. PLoS ONE, 2012, 7, e48232.	1.1	65
83	Estimating A Reference Standard Segmentation With Spatially Varying Performance Parameters: Local MAP STAPLE. IEEE Transactions on Medical Imaging, 2012, 31, 1593-1606.	5.4	64
84	Simultaneous Truth and Performance Level Estimation Through Fusion of Probabilistic Segmentations. IEEE Transactions on Medical Imaging, 2013, 32, 1840-1852.	5.4	64
85	Automated Atlas-Based Clustering of White Matter Fiber Tracts from DTMRI. Lecture Notes in Computer Science, 2005, 8, 188-195.	1.0	63
86	Fetal brain volumetry through MRI volumetric reconstruction and segmentation. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 329-339.	1.7	62
87	Reliable estimation of incoherent motion parametric maps from diffusion-weighted MRI using fusion bootstrap moves. Medical Image Analysis, 2013, 17, 325-336.	7.0	62
88	Heavy Prenatal Alcohol Exposure is Related to Smaller Corpus Callosum in Newborn <scp>MRI</scp> Scans. Alcoholism: Clinical and Experimental Research, 2017, 41, 965-975.	1.4	62
89	Three-Dimensional Optical Flow Method for Measurement of Volumetric Brain Deformation from Intraoperative MR Images. Journal of Computer Assisted Tomography, 2000, 24, 531-538.	0.5	60
90	Missing Slice Recovery for Tensors Using a Low-Rank Model in Embedded Space. , 2018, , .		60

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91	Diffusion Features of White Matter in Tuberous Sclerosis With Tractography. Pediatric Neurology, 2010, 42, 101-106.	1.0	59
92	Early versus late MRI in asphyxiated newborns treated with hypothermia. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2011, 96, F36-F44.	1.4	59
93	Brain Development of the Preterm Neonate After Neonatal Hydrocortisone Treatment for Chronic Lung Disease. Pediatric Research, 2009, 66, 555-559.	1.1	58
94	Validation of Image Segmentation and Expert Quality with an Expectation-Maximization Algorithm. Lecture Notes in Computer Science, 2002, , 298-306.	1.0	57
95	Hippocampal shape variations at term equivalent age in very preterm infants compared with term controls: Perinatal predictors and functional significance at age 7. Neurolmage, 2013, 70, 278-287.	2.1	57
96	3D Segmentation in the Clinic: A Grand Challenge II: MS lesion segmentation. , 2008, , .		56
97	Fetal Brain Volume Predicts Neurodevelopment in Congenital Heart Disease. Circulation, 2022, 145, 1108-1119.	1.6	56
98	MRâ€determined hippocampal asymmetry in fullâ€term and preterm neonates. Hippocampus, 2009, 19, 118-123.	0.9	55
99	A Model of Population and Subject (MOPS) Intensities With Application to Multiple Sclerosis Lesion Segmentation. IEEE Transactions on Medical Imaging, 2015, 34, 1349-1361.	5.4	55
100	Temporal slice registration and robust diffusion-tensor reconstruction for improved fetal brain structural connectivity analysis. Neurolmage, 2017, 156, 475-488.	2.1	54
101	Cross-scanner and cross-protocol multi-shell diffusion MRI data harmonization: Algorithms and results. NeuroImage, 2020, 221, 117128.	2.1	54
102	TUMOR DETECTION BY VIRTUAL CYSTOSCOPY WITH COLOR MAPPING OF BLADDER WALL THICKNESS. Journal of Urology, 2002, 167, 559-562.	0.2	53
103	A Logarithmic Opinion Pool Based STAPLE Algorithm for the Fusion of Segmentations With Associated Reliability Weights. IEEE Transactions on Medical Imaging, 2014, 33, 1997-2009.	5.4	52
104	White Matter Volume Predicts Language Development in Congenital Heart Disease. Journal of Pediatrics, 2017, 181, 42-48.e2.	0.9	52
105	Suite of meshless algorithms for accurate computation of soft tissue deformation for surgical simulation. Medical Image Analysis, 2019, 56, 152-171.	7.0	52
106	Quantitative MR Imaging Assessment of Prostate Gland Deformation before and During MR Imaging–Guided Brachytherapy. Academic Radiology, 2002, 9, 906-912.	1.3	51
107	Guest Editorial Validation in Medical Image Processing. IEEE Transactions on Medical Imaging, 2006, 25, 1405-1409.	5.4	51
108	Real-time automatic fetal brain extraction in fetal MRI by deep learning. , 2018, , .		50

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109	Registration of 3D Intraoperative MR Images of the Brain Using a Finite Element Biomechanical Model. Lecture Notes in Computer Science, 2000, , 19-28.	1.0	49
110	Automated delineation of white matter fiber tracts with a multiple region-of-interest approach. Neurolmage, 2012, 59, 3690-3700.	2.1	49
111	Regional Brain Growth Trajectories in Fetuses with Congenital Heart Disease. Annals of Neurology, 2021, 89, 143-157.	2.8	49
112	Brain Shift Computation Using a Fully Nonlinear Biomechanical Model. Lecture Notes in Computer Science, 2005, 8, 583-590.	1.0	49
113	Validation of image segmentation by estimating rater bias and variance. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2361-2375.	1.6	48
114	School-age effects of the newborn individualized developmental care and assessment program for preterm infants with intrauterine growth restriction: preliminary findings. BMC Pediatrics, 2013, 13, 25.	0.7	48
115	A fuzzy system for helping medical diagnosis of malformations of cortical development. Journal of Biomedical Informatics, 2007, 40, 221-235.	2.5	47
116	Segmentations of MRI images of the female pelvic floor: A study of inter―and intra―eader reliability. Journal of Magnetic Resonance Imaging, 2011, 33, 684-691.	1.9	47
117	Optimization of tractography of the optic radiations. Human Brain Mapping, 2014, 35, 683-697.	1.9	47
118	Virtual CT Cystoscopy. Investigative Radiology, 2000, 35, 331.	3.5	47
119	3D Image Matching Using a Finite Element Based Elastic Deformation Model. Lecture Notes in Computer Science, 1999, , 202-209.	1.0	46
120	Tumor detection in the bladder wall with a measurement of abnormal thickness in CT scans. IEEE Transactions on Biomedical Engineering, 2003, 50, 383-390.	2.5	46
121	Changes in neonatal regional brain volume associated with preterm birth and perinatal factors. Neurolmage, 2019, 185, 654-663.	2.1	45
122	Three-Dimensional Assessment of MRI-Guided Percutaneous Cryotherapy of Liver Metastases. American Journal of Roentgenology, 2004, 183, 707-712.	1.0	44
123	Reproducibility of Brain MRI Segmentation Algorithms: Empirical Comparison of Local MAP PSTAPLE, FreeSurfer, and FSLâ€FIRST. Journal of Neuroimaging, 2018, 28, 162-172.	1.0	43
124	<i>In vivo</i> assessment of optimal <i>b</i> â€value range for perfusionâ€insensitive apparent diffusion coefficient imaging. Medical Physics, 2012, 39, 4832-4839.	1.6	42
125	Hippocampal Formation Maldevelopment and Sudden Unexpected Death across the Pediatric Age Spectrum. Journal of Neuropathology and Experimental Neurology, 2016, 75, 981-997.	0.9	42
126	Active delineation of Meyer's loop using oriented priors through MAGNEtic tractography (MAGNET). Human Brain Mapping, 2017, 38, 509-527.	1.9	42

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127	Reduced Occipital Regional Volumes at Term Predict Impaired Visual Function in Early Childhood in Very Low Birth Weight Infants. , 2006, 47, 3366.		41
128	Presurgical language fMRI: Clinical practices and patient outcomes in epilepsy surgical planning. Human Brain Mapping, 2018, 39, 2777-2785.	1.9	41
129	An In Vivo MRI Study of Prefrontal Cortical Complexity in First-Episode Psychosis. American Journal of Psychiatry, 2005, 162, 65-70.	4.0	40
130	Characterization of fast and slow diffusion from diffusionâ€weighted MRI of pediatric Crohn's disease. Journal of Magnetic Resonance Imaging, 2013, 37, 156-163.	1.9	40
131	Diffusion tensor imaging and related techniques in tuberous sclerosis complex: review and future directions. Future Neurology, 2013, 8, 583-597.	0.9	40
132	Head motion measurement and correction using <scp>FID</scp> navigators. Magnetic Resonance in Medicine, 2019, 81, 258-274.	1.9	40
133	Early-Emerging Sulcal Patterns Are Atypical in Fetuses with Congenital Heart Disease. Cerebral Cortex, 2019, 29, 3605-3616.	1.6	40
134	Quantitative In vivo MRI Assessment of Structural Asymmetries and Sexual Dimorphism of Transient Fetal Compartments in the Human Brain. Cerebral Cortex, 2020, 30, 1752-1767.	1.6	40
135	Nonlinear Registration and Template-Driven Segmentation. , 1999, , 67-84.		39
136	Presurgical language fMRI: Technical practices in epilepsy surgical planning. Human Brain Mapping, 2018, 39, 4032-4042.	1.9	38
137	Towards microstructure fingerprinting: Estimation of tissue properties from a dictionary of Monte Carlo diffusion MRI simulations. NeuroImage, 2019, 184, 964-980.	2.1	38
138	Perfusion Imaging of Focal Cortical Dysplasia Using Arterial Spin Labeling. Journal of Child Neurology, 2013, 28, 1474-1482.	0.7	37
139	More accurate neuronavigation data provided by biomechanical modeling instead of rigid registration. Journal of Neurosurgery, 2014, 120, 1477-1483.	0.9	37
140	Increased electroencephalography connectivity precedes epileptic spasm onset in infants with tuberous sclerosis complex. Epilepsia, 2019, 60, 1721-1732.	2.6	37
141	Altered Structural Brain Networks in Tuberous Sclerosis Complex. Cerebral Cortex, 2016, 26, 2046-2058.	1.6	36
142	Pre- and Intra-operative Planning and Simulation of Percutaneous Tumor Ablation. Lecture Notes in Computer Science, 2000, , 317-326.	1.0	35
143	Evaluation of motion and its effect on brain magnetic resonance image quality in children. Pediatric Radiology, 2016, 46, 1728-1735.	1.1	35
144	An EM algorithm for shape classification based on level sets. Medical Image Analysis, 2005, 9, 491-502.	7.0	34

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145	Image-guided neurosurgery at Brigham and Women's Hospital. IEEE Engineering in Medicine and Biology Magazine, 2006, 25, 67-73.	1.1	34
146	Biomechanical Model as a Registration Tool for Image-Guided Neurosurgery: Evaluation Against BSpline Registration. Annals of Biomedical Engineering, 2013, 41, 2409-2425.	1.3	34
147	A New Sparse Representation Framework for Reconstruction of an Isotropic High Spatial Resolution MR Volume From Orthogonal Anisotropic Resolution Scans. IEEE Transactions on Medical Imaging, 2017, 36, 1182-1193.	5.4	34
148	A Mathematical Framework for the Registration and Analysis of Multi-Fascicle Models for Population Studies of the Brain Microstructure. IEEE Transactions on Medical Imaging, 2014, 33, 504-517.	5.4	33
149	Diffusion MRI microstructure models with in vivo human brain Connectome data: results from a multiâ€group comparison. NMR in Biomedicine, 2017, 30, e3734.	1.6	33
150	Construction of a Deformable Spatiotemporal MRI Atlas of the Fetal Brain: Evaluation of Similarity Metrics and Deformation Models. Lecture Notes in Computer Science, 2014, 17, 292-299.	1.0	32
151	Electrode localization for planning surgical resection of the epileptogenic zone in pediatric epilepsy. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 91-105.	1.7	32
152	Automatic renal segmentation in DCE-MRI using convolutional neural networks., 2018, 2018, 1534-1537.		32
153	Reproducibility of Structural and Diffusion Tensor Imaging in the TACERN Multi-Center Study. Frontiers in Integrative Neuroscience, 2019, 13, 24.	1.0	32
154	Intelligent Labeling Based on Fisher Information for Medical Image Segmentation Using Deep Learning. IEEE Transactions on Medical Imaging, 2019, 38, 2642-2653.	5.4	32
155	Early white matter development is abnormal in tuberous sclerosis complex patients who develop autism spectrum disorder. Journal of Neurodevelopmental Disorders, 2019, 11, 36.	1.5	32
156	Incorporating Priors on Expert Performance Parameters for Segmentation Validation and Label Fusion: A Maximum a Posteriori STAPLE. Lecture Notes in Computer Science, 2010, 13, 25-32.	1.0	32
157	Incorporating Non-rigid Registration into Expectation Maximization Algorithm to Segment MR Images. Lecture Notes in Computer Science, 2002, 2488, 564-571.	1.0	31
158	A Continuous STAPLE for Scalar, Vector, and Tensor Images: An Application to DTI Analysis. IEEE Transactions on Medical Imaging, 2009, 28, 838-846.	5.4	31
159	Automated template-based brain localization and extraction for fetal brain MRI reconstruction. Neurolmage, 2017, 155, 460-472.	2.1	31
160	Probabilistic Clustering and Quantitative Analysis of White Matter Fiber Tracts. Lecture Notes in Computer Science, 2007, 20, 372-383.	1.0	31
161	TUMOR DETECTION BY VIRTUAL CYSTOSCOPY WITH COLOR MAPPING OF BLADDER WALL THICKNESS. Journal of Urology, 2002, 167, 559-562.	0.2	31
162	Displacement of brain regions in preterm infants with non-synostotic dolichocephaly investigated by MRI. NeuroImage, 2007, 36, 1074-1085.	2.1	30

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163	Magnetic Resonance Imaging of Pediatric Lung Parenchyma, Airways, Vasculature, Ventilation, and Perfusion. Radiologic Clinics of North America, 2013, 51, 555-582.	0.9	30
164	Passive fMRI mapping of language function for pediatric epilepsy surgical planning: Validation using Wada, ECS, and FMAER. Epilepsy Research, 2014, 108, 1874-1888.	0.8	30
165	Motion-Robust Diffusion-Weighted Brain MRI Reconstruction Through Slice-Level Registration-Based Motion Tracking. IEEE Transactions on Medical Imaging, 2016, 35, 2258-2269.	5.4	30
166	Statistical validation based on parametric receiver operating characteristic analysis of continuous classification data1. Academic Radiology, 2003, 10, 1359-1368.	1.3	29
167	Efficient multi-modal dense field non-rigid registration: alignment of histological and section images. Medical Image Analysis, 2005, 9, 538-546.	7.0	29
168	Differential Rates of Perinatal Maturation of Human Primary and Nonprimary Auditory Cortex. ENeuro, 2018, 5, ENEURO.0380-17.2017.	0.9	29
169	Multimodality deformable registration of pre- and intraoperative images for MRI-guided brain surgery. Lecture Notes in Computer Science, 1998, , 1067-1074.	1.0	28
170	Toward Real-Time Image Guided Neurosurgery Using Distributed and Grid Computing. , 2006, , .		28
171	Real-Time Prediction of Brain Shift Using Nonlinear Finite Element Algorithms. Lecture Notes in Computer Science, 2009, 12, 300-307.	1.0	28
172	Can induced hypothermia be assured during brain MRI in neonates with hypoxic-ischemic encephalopathy?. Pediatric Radiology, 2010, 40, 1950-1954.	1.1	28
173	Estimation of Inferential Uncertainty in Assessing Expert Segmentation Performance From STAPLE. IEEE Transactions on Medical Imaging, 2010, 29, 771-780.	5.4	28
174	Tubers are neither static nor discrete. Neurology, 2015, 85, 1536-1545.	1.5	28
175	In vivo characterization of emerging white matter microstructure in the fetal brain in the third trimester. Human Brain Mapping, 2020, 41, 3177-3185.	1.9	28
176	Single Anisotropic 3-D MR Image Upsampling via Overcomplete Dictionary Trained From In-Plane High Resolution Slices. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1552-1561.	3.9	27
177	A structural brain network of genetic vulnerability to psychiatric illness. Molecular Psychiatry, 2021, 26, 2089-2100.	4.1	27
178	Using Frankenstein's Creature Paradigm to Build a Patient Specific Atlas. Lecture Notes in Computer Science, 2009, 12, 993-1000.	1.0	27
179	An image processing strategy for the quantification and visualization of exercise-induced muscle MRI signal enhancement. Journal of Magnetic Resonance Imaging, 2000, 11, 525-531.	1.9	26
180	Localization of the Epileptogenic Foci in Tuberous Sclerosis Complex: A Pediatric Case Report. Frontiers in Human Neuroscience, 2014, 8, 175.	1.0	26

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181	Block-Matching Distortion Correction of Echo-Planar Images With Opposite Phase Encoding Directions. IEEE Transactions on Medical Imaging, 2017, 36, 1106-1115.	5.4	26
182	Left Ventricular Segmentation Challenge from Cardiac MRI: A Collation Study. Lecture Notes in Computer Science, 2012, , 88-97.	1.0	26
183	A limited range of measures of 2-d ultrasound correlate with 3-d mri cerebral volumes in the premature infant at term. Ultrasound in Medicine and Biology, 2004, 30, 11-18.	0.7	25
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