Donald Louis Collins

List of Publications by Year
in descending order

499	51,300	2975	1934
papers	citations	93 h-index	207 g-index

576	576	576	39846
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Multimodal Brain Tumor Image Segmentation Benchmark (BRATS). IEEE Transactions on Medical Imaging, 2015, 34, 1993-2024.	8.9	3,589
2	Automatic 3D Intersubject Registration of MR Volumetric Data in Standardized Talairach Space. Journal of Computer Assisted Tomography, 1994, 18, 192-205.	0.9	3,049
3	Evaluation of 14 nonlinear deformation algorithms applied to human brain MRI registration. NeuroImage, 2009, 46, 786-802.	4.2	1,988
4	A probabilistic atlas and reference system for the human brain: International Consortium for Brain Mapping (ICBM). Philosophical Transactions of the Royal Society B: Biological Sciences, 2001, 356, 1293-1322.	4.0	1,959
5	Unbiased average age-appropriate atlases for pediatric studies. NeuroImage, 2011, 54, 313-327.	4.2	1,825
6	Design and construction of a realistic digital brain phantom. IEEE Transactions on Medical Imaging, 1998, 17, 463-468.	8.9	1,506
7	Enhancement of MR Images Using Registration for Signal Averaging. Journal of Computer Assisted Tomography, 1998, 22, 324-333.	0.9	1,248
8	Structural Maturation of Neural Pathways in Children and Adolescents: In Vivo Study. Science, 1999, 283, 1908-1911.	12.6	1,196
9	Automatic 3â€D modelâ€based neuroanatomical segmentation. Human Brain Mapping, 1995, 3, 190-208.	3.6	844
10	Adaptive nonâ€local means denoising of MR images with spatially varying noise levels. Journal of Magnetic Resonance Imaging, 2010, 31, 192-203.	3.4	823
11	Early brain development in infants at high risk for autism spectrum disorder. Nature, 2017, 542, 348-351.	27.8	808
12	Maturation of white matter in the human brain: a review of magnetic resonance studies. Brain Research Bulletin, 2001, 54, 255-266.	3.0	788
13	Patch-based segmentation using expert priors: Application to hippocampus and ventricle segmentation. NeuroImage, 2011, 54, 940-954.	4.2	692
14	Volumetry of Hippocampus and Amygdala with High-resolution MRI and Three-dimensional Analysis Software: Minimizing the Discrepancies between Laboratories. Cerebral Cortex, 2000, 10, 433-442.	2.9	633
15	Accurate, noninvasive diagnosis of human brain tumors by using proton magnetic resonance spectroscopy. Nature Medicine, 1996, 2, 323-325.	30.7	522
16	BEaST: Brain extraction based on nonlocal segmentation technique. NeuroImage, 2012, 59, 2362-2373.	4.2	507
17	Brain templates and atlases. NeuroImage, 2012, 62, 911-922.	4.2	461
18	Incorporating Prior Knowledge into Image Registration. NeuroImage, 1997, 6, 344-352.	4.2	427

#	Article	IF	Citations
19	Toward defining deep brain stimulation targets in MNI space: A subcortical atlas based on multimodal MRI, histology and structural connectivity. NeuroImage, 2018, 170, 271-282.	4.2	422
20	Anatomical mapping of functional activation in stereotactic coordinate space. NeuroImage, 1992, 1, 43-53.	4.2	402
21	SCT: Spinal Cord Toolbox, an open-source software for processing spinal cord MRI data. NeuroImage, 2017, 145, 24-43.	4.2	390
22	A Unified Statistical Approach to Deformation-Based Morphometry. NeuroImage, 2001, 14, 595-606.	4.2	372
23	Evaluation of Registration Methods on Thoracic CT: The EMPIRE10 Challenge. IEEE Transactions on Medical Imaging, 2011, 30, 1901-1920.	8.9	363
24	Symmetric Atlasing and Model Based Segmentation: An Application to the Hippocampus in Older Adults. Lecture Notes in Computer Science, 2006, 9, 58-66.	1.3	350
25	Changes in Cortical Thickness During the Course of Illness in Schizophrenia. Archives of General Psychiatry, 2011, 68, 871.	12.3	329
26	Total and Regional Brain Volumes in a Population-Based Normative Sample from 4 to 18 Years: The NIH MRI Study of Normal Brain Development. Cerebral Cortex, 2012, 22, 1-12.	2.9	322
27	Animal: Validation and Applications of Nonlinear Registration-Based Segmentation. International Journal of Pattern Recognition and Artificial Intelligence, 1997, 11, 1271-1294.	1.2	317
28	A Four-Dimensional Probabilistic Atlas of the Human Brain. Journal of the American Medical Informatics Association: JAMIA, 2001, 8, 401-430.	4.4	313
29	Performing label-fusion-based segmentation using multiple automatically generated templates. Human Brain Mapping, 2013, 34, 2635-2654.	3.6	311
30	Diffusion Weighted Image Denoising Using Overcomplete Local PCA. PLoS ONE, 2013, 8, e73021.	2.5	299
31	Volumetry of Temporopolar, Perirhinal, Entorhinal and Parahippocampal Cortex from High-resolution MR Images: Considering the Variability of the Collateral Sulcus. Cerebral Cortex, 2002, 12, 1342-1353.	2.9	282
32	Review of automatic segmentation methods of multiple sclerosis white matter lesions on conventional magnetic resonance imaging. Medical Image Analysis, 2013, 17, 1-18.	11.6	280
33	Whole-brain voxel-based statistical analysis of gray matter and white matter in temporal lobe epilepsy. NeuroImage, 2004, 23, 717-723.	4.2	276
34	Age and Gender Predict Volume Decline in the Anterior and Posterior Hippocampus in Early Adulthood. Journal of Neuroscience, 2001, 21, 194-200.	3.6	273
35	The creation of a brain atlas for image guided neurosurgery using serial histological data. NeuroImage, 2006, 30, 359-376.	4.2	271
36	Genetic Contributions to Human Brain Morphology and Intelligence. Journal of Neuroscience, 2006, 26, 10235-10242.	3.6	271

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37	Focal Gray Matter Changes in Schizophrenia across the Course of the Illness: A 5-Year Follow-Up Study. Neuropsychopharmacology, 2007, 32, 2057-2066.	5.4	267
38	Stress regulation in the central nervous system: evidence from structural and functional neuroimaging studies in human populations - 2008 Curt Richter Award Winner. Psychoneuroendocrinology, 2010, 35, 179-191.	2.7	267
39	Functional neuroimaging of high-risk 6-month-old infants predicts a diagnosis of autism at 24 months of age. Science Translational Medicine, 2017, 9, .	12.4	264
40	Focal Gray Matter Density Changes in Schizophrenia. Archives of General Psychiatry, 2001, 58, 1118.	12.3	255
41	MRI-PET Correlation in Three Dimensions Using a Volume-of-Interest (VOI) Atlas. Journal of Cerebral Blood Flow and Metabolism, 1991, 11, A69-A78.	4.3	253
42	Imaging of axonal damage in multiple sclerosis: Spatial distribution of magnetic resonance imaging lesions. Annals of Neurology, 1997, 41, 385-391.	5.3	253
43	Trajectories of cortical thickness maturation in normal brain development â€" The importance of quality control procedures. NeuroImage, 2016, 125, 267-279.	4.2	251
44	Automated cortical thickness measurements from MRI can accurately separate Alzheimer's patients from normal elderly controls. Neurobiology of Aging, 2008, 29, 23-30.	3.1	242
45	A new improved version of the realistic digital brain phantom. NeuroImage, 2006, 32, 138-145.	4.2	236
46	A review of calibration techniques for freehand 3-D ultrasound systems. Ultrasound in Medicine and Biology, 2005, 31, 449-471.	1.5	229
47	New methods for MRI denoising based on sparseness and self-similarity. Medical Image Analysis, 2012, 16, 18-27.	11.6	224
48	Prediction of Alzheimer's disease in subjects with mild cognitive impairment from the ADNI cohort using patterns of cortical thinning. NeuroImage, 2013, 65, 511-521.	4.2	224
49	Non-local MRI upsampling. Medical Image Analysis, 2010, 14, 784-792.	11.6	218
50	Towards accurate, automatic segmentation of the hippocampus and amygdala from MRI by augmenting ANIMAL with a template library and label fusion. NeuroImage, 2010, 52, 1355-1366.	4.2	215
51	Brain shift in neuronavigation of brain tumors: A review. Medical Image Analysis, 2017, 35, 403-420.	11.6	214
52	Tuning and comparing spatial normalization methods. Medical Image Analysis, 2004, 8, 311-323.	11.6	210
53	Developmental Changes in Organization of Structural Brain Networks. Cerebral Cortex, 2013, 23, 2072-2085.	2.9	203
54	Robust Rician noise estimation for MR images. Medical Image Analysis, 2010, 14, 483-493.	11.6	200

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55	Twenty New Digital Brain Phantoms for Creation of Validation Image Data Bases. IEEE Transactions on Medical Imaging, 2006, 25, 1410-1416.	8.9	198
56	Network connectivity determines cortical thinning in early Parkinsonâ€™s disease progression. Nature Communications, 2018, 9, 12.	12.8	198
57	A review of calibration techniques for freehand 3-D ultrasound systems. Ultrasound in Medicine and Biology, 2005, 31, 143-165.	1.5	196
58	Use of proton magnetic resonance spectroscopy for monitoring disease progression in multiple sclerosis. Annals of Neurology, 1994, 36, 76-82.	5.3	192
59	Network structure of brain atrophy in de novo Parkinson's disease. ELife, 2015, 4, .	6.0	187
60	Structural plasticity of the social brain: Differential change after socio-affective and cognitive mental training. Science Advances, 2017, 3, e1700489.	10.3	184
61	Retrospective evaluation of intersubject brain registration. IEEE Transactions on Medical Imaging, 2003, 22, 1120-1130.	8.9	179
62	Model-based 3-D segmentation of multiple sclerosis lesions in magnetic resonance brain images. IEEE Transactions on Medical Imaging, 1995, 14, 442-453.	8.9	174
63	Increased Extra-axial Cerebrospinal Fluid in High-Risk Infants Who Later Develop Autism. Biological Psychiatry, 2017, 82, 186-193.	1.3	173
64	Axonal metabolic recovery in multiple sclerosis patients treated with interferon Î²-1b. Journal of Neurology, 2001, 248, 979-986.	3.6	171
65	Magnetization transfer ratio evolution with demyelination and remyelination in multiple sclerosis lesions. Annals of Neurology, 2008, 63, 254-262.	5.3	169
66	Highâ€frequency oscillations, extent of surgical resection, and surgical outcome in drugâ€resistant focal epilepsy. Epilepsia, 2013, 54, 848-857.	5.1	166
67	White-matter diffusion abnormalities in temporal-lobe epilepsy with and without mesial temporal sclerosis. Journal of Neurology, Neurosurgery and Psychiatry, 2009, 80, 312-319.	1.9	165
68	Standardized Assessment of Automatic Segmentation of White Matter Hyperintensities and Results of the WMH Segmentation Challenge. IEEE Transactions on Medical Imaging, 2019, 38, 2556-2568.	8.9	165
69	Focal white matter density changes in schizophrenia: reduced inter-hemispheric connectivity. NeuroImage, 2004, 21, 27-35.	4.2	163
70	The EADCâ€ADNI Harmonized Protocol for manual hippocampal segmentation on magnetic resonance: Evidence of validity. Alzheimer's and Dementia, 2015, 11, 111-125.	0.8	162
71	Heritability of regional and global brain structure at the onset of puberty: A magnetic resonance imaging study in 9â€yearâ€old twin pairs. Human Brain Mapping, 2009, 30, 2184-2196.	3.6	155
72	An MRI based average macaque monkey stereotaxic atlas and space (MNI monkey space). NeuroImage, 2011, 55, 1435-1442.	4.2	154

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73	Anxious/Depressed Symptoms are Linked to Right Ventromedial Prefrontal Cortical Thickness Maturation in Healthy Children and Young Adults. Cerebral Cortex, 2014, 24, 2941-2950.	2.9	149
74	Relating neocortical pathology to disability progression in multiple sclerosis using MRI. NeuroImage, 2004, 23, 1168-1175.	4.2	147
75	A new method for structural volume analysis of longitudinal brain MRI data and its application in studying the growth trajectories of anatomical brain structures in childhood. NeuroImage, 2013, 82, 393-402.	4.2	145
76	Automated extraction and variability analysis of sulcal neuroanatomy. IEEE Transactions on Medical Imaging, 1999, 18, 206-217.	8.9	143
77	PAM50: Unbiased multimodal template of the brainstem and spinal cord aligned with the ICBM152 space. NeuroImage, 2018, 165, 170-179.	4.2	143
78	ANIMAL+INSECT: Improved Cortical Structure Segmentation. Lecture Notes in Computer Science, 1999, , 210-223.	1.3	139
79	Object-Based Morphometry of the Cerebral Cortex. IEEE Transactions on Medical Imaging, 2004, 23, 968-982.	8.9	136
80	Decreased cerebral cortical serotonin transporter binding in ecstasy users: a positron emission tomography/[11C]DASB and structural brain imaging study. Brain, 2010, 133, 1779-1797.	7.6	134
81	MRI-Based Automated Computer Classification of Probable AD Versus Normal Controls. IEEE Transactions on Medical Imaging, 2008, 27, 509-520.	8.9	133
82	MRI correlates of cognitive impairment in childhood-onset multiple sclerosis.. Neuropsychology, 2011, 25, 319-332.	1.3	132
83	Simultaneous segmentation and grading of anatomical structures for patient's classification: Application to Alzheimer's disease. NeuroImage, 2012, 59, 3736-3747.	4.2	129
84	Multivariate analysis of MRI data for Alzheimer's disease, mild cognitive impairment and healthy controls. NeuroImage, 2011, 54, 1178-1187.	4.2	128
85	Evaluating intensity normalization on MRIs of human brain with multiple sclerosis. Medical Image Analysis, 2011, 15, 267-282.	11.6	126
86	Automated detection of focal cortical dysplasia lesions using computational models of their MRI characteristics and texture analysis. NeuroImage, 2003, 19, 1748-1759.	4.2	125
87	The state of the art of visualization in mixed reality image guided surgery. Computerized Medical Imaging and Graphics, 2013, 37, 98-112.	5.8	122
88	A comparison of publicly available linear MRI stereotaxic registration techniques. NeuroImage, 2018, 174, 191-200.	4.2	120
89	Neuroanatomical differences in obesity: meta-analytic findings and their validation in an independent dataset. International Journal of Obesity, 2019, 43, 943-951.	3.4	116
90	<title>Warping of a computerized 3-D atlas to match brain image volumes for quantitative neuroanatomical and functional analysis</title>. , 1991, 1445, 236.		111

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91	Neural circuitry at age 6Âmonths associated with later repetitive behavior and sensory responsiveness in autism. Molecular Autism, 2017, 8, 8.	4.9	111
92	Overlapping and Segregating Structural Brain Abnormalities in Twins With Schizophrenia or Bipolar Disorder. Archives of General Psychiatry, 2012, 69, 349.	12.3	107
93	Onset of multiple sclerosis before adulthood leads to failure of age-expected brain growth. Neurology, 2014, 83, 2140-2146.	1.1	107
94	Training labels for hippocampal segmentation based on the EADCâ€ADNI harmonized hippocampal protocol. Alzheimer's and Dementia, 2015, 11, 175-183.	0.8	105
95	Neurobehavioral correlates of obesity are largely heritable. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9312-9317.	7.1	105
96	Scoring by nonlocal image patch estimator for early detection of Alzheimer's disease. NeuroImage: Clinical, 2012, 1, 141-152.	2.7	104
97	Childhood cognitive ability accounts for associations between cognitive ability and brain cortical thickness in old age. Molecular Psychiatry, 2014, 19, 555-559.	7.9	104
98	Assessing the risk of central post-stroke pain of thalamic origin by lesion mapping. Brain, 2012, 135, 2536-2545.	7.6	101
99	Structural imaging biomarkers of Alzheimer's disease: predicting disease progression. Neurobiology of Aging, 2015, 36, S23-S31.	3.1	101
100	Structural Brain Alterations Associated with Rapid Eye Movement Sleep Behavior Disorder in Parkinsonâ€™s Disease. Scientific Reports, 2016, 6, 26782.	3.3	101
101	The Canadian Dementia Imaging Protocol: Harmonizing National Cohorts. Journal of Magnetic Resonance Imaging, 2019, 49, 456-465.	3.4	101
102	Gray and white matter density changes in monozygotic and same-sex dizygotic twins discordant for schizophrenia using voxel-based morphometry. NeuroImage, 2006, 31, 482-488.	4.2	100
103	Design and Implementation of an Automated Partial Volume Correction in PET: Application to Dopamine Receptor Quantification in the Normal Human Striatum. Journal of Nuclear Medicine, 2008, 49, 1097-1106.	5.0	96
104	Diurnal fluctuations in brain volume: Statistical analyses of MRI from large populations. NeuroImage, 2015, 118, 126-132.	4.2	96
105	Brain atrophy after immunoablation and stem cell transplantation in multiple sclerosis. Neurology, 2006, 66, 1935-1937.	1.1	94
106	Cerebral white matter in early puberty is associated with luteinizing hormone concentrations. Psychoneuroendocrinology, 2008, 33, 909-915.	2.7	94
107	Association of Brain Structure Changes and Cognitive Function With Combination Antiretroviral Therapy in HIV-Positive Individuals. JAMA Neurology, 2018, 75, 72.	9.0	94
108	A dataset of multi-contrast population-averaged brain MRI atlases of a Parkinson×³s disease cohort. Data in Brief, 2017, 12, 370-379.	1.0	94

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109	Hippocampal shape analysis using medial surfaces. NeuroImage, 2005, 25, 1077-1089.	4.2	93
110	Voxel-based analysis of the evolution of magnetization transfer ratio to quantify remyelination and demyelination with histopathological validation in a multiple sclerosis lesion. NeuroImage, 2007, 36, 1152-1158.	4.2	93
111	Online database of clinical MR and ultrasound images of brain tumors. Medical Physics, 2012, 39, 3253-3261.	3.0	93
112	The Emergence of Network Inefficiencies in Infants With Autism Spectrum Disorder. Biological Psychiatry, 2017, 82, 176-185.	1.3	93
113	Framework for integrated MRI average of the spinal cord white and gray matter: The MNIâ€“Polyâ€“AMU template. NeuroImage, 2014, 102, 817-827.	4.2	92
114	Volumetric analysis of medial temporal lobe structures in brain development from childhood to adolescence. NeuroImage, 2013, 74, 276-287.	4.2	91
115	Towards a validation of atlas warping techniques. Medical Image Analysis, 2008, 12, 713-726.	11.6	90
116	Relating one-year cognitive change in mild cognitive impairment to baseline MRI features. NeuroImage, 2009, 47, 1363-1370.	4.2	90
117	Brain Plasticity and Intellectual Ability Are Influenced by Shared Genes. Journal of Neuroscience, 2010, 30, 5519-5524.	3.6	90
118	Prediction of brain maturity based on cortical thickness at different spatial resolutions. NeuroImage, 2015, 111, 350-359.	4.2	90
119	Feature-based morphometry: Discovering group-related anatomical patterns. NeuroImage, 2010, 49, 2318-2327.	4.2	88
120	Validation of vessel-based registration for correction of brain shift. Medical Image Analysis, 2007, 11, 374-388.	11.6	86
121	A deformable phantom for 4D radiotherapy verification: Design and image registration evaluation. Medical Physics, 2008, 35, 1094-1102.	3.0	86
122	Right Anterior Cingulate Cortical Thickness and Bilateral Striatal Volume Correlate with Child Behavior Checklist Aggressive Behavior Scores in Healthy Children. Biological Psychiatry, 2011, 70, 283-290.	1.3	86
123	Self-similarity weighted mutual information: A new nonrigid image registration metric. Medical Image Analysis, 2014, 18, 343-358.	11.6	86
124	Network inefficiencies in autism spectrum disorder at 24 months. Translational Psychiatry, 2014, 4, e388-e388.	4.8	85
125	Validation of a Regression Technique for Segmentation of White Matter Hyperintensities in Alzheimerâ€™s Disease. IEEE Transactions on Medical Imaging, 2017, 36, 1758-1768.	8.9	85
126	Adaptive multiresolution non-local means filter for three-dimensional magnetic resonance image denoising. IET Image Processing, 2012, 6, 558.	2.5	84

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127	Automated atlas integration and interactive three-dimensional visualization tools for planning and guidance in functional neurosurgery. IEEE Transactions on Medical Imaging, 1998, 17, 672-680.	8.9	83
128	Genetic influences on thinning of the cerebral cortex during development. NeuroImage, 2012, 59, 3871-3880.	4.2	83
129	Augmented reality in neurovascular surgery: feasibility and first uses in the operating room. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1823-1836.	2.8	83
130	Evaluation of automated techniques for the quantification of grey matter atrophy in patients with multiple sclerosis. NeuroImage, 2010, 52, 1261-1267.	4.2	82
131	Detecting Early Preclinical Alzheimer's Disease via Cognition, Neuropsychiatry, and Neuroimaging: Qualitative Review and Recommendations for Testing. Journal of Alzheimer's Disease, 2014, 42, S375-S382.	2.6	81
132	Reduced head and brain size for age and disproportionately smaller thalami in child-onset MS. Neurology, 2012, 78, 194-201.	1.1	80
133	Comparing fully automated state-of-the-art cerebellum parcellation from magnetic resonance images. NeuroImage, 2018, 183, 150-172.	4.2	80
134	MRI Superresolution Using Self-Similarity and Image Priors. International Journal of Biomedical Imaging, 2010, 2010, 1-11.	3.9	79
135	Performance comparison of 10 different classification techniques in segmenting white matter hyperintensities in aging. NeuroImage, 2017, 157, 233-249.	4.2	79
136	Mapping reliability in multicenter MRI: Voxelâ€based morphometry and cortical thickness. Human Brain Mapping, 2010, 31, 1967-1982.	3.6	77
137	Frontolimbic neural circuitry at 6Âmonths predicts individual differences in joint attention at 9Âmonths. Developmental Science, 2013, 16, 186-197.	2.4	77
138	Brain morphometry using 3D moment invariants. Medical Image Analysis, 2004, 8, 187-196.	11.6	75
139	Regionally Specific Brain Volumetric and Cortical Thickness Changes in HIV-Infected Patients in the HAART Era. Journal of Acquired Immune Deficiency Syndromes (1999), 2017, 74, 563-570.	2.1	75
140	PET-SORTEO: validation and development of database of Simulated PET volumes. IEEE Transactions on Nuclear Science, 2005, 52, 1321-1328.	2.0	74
141	Cannabis use and progressive cortical thickness loss in areas rich in CB1 receptors during the first five years of schizophrenia. European Neuropsychopharmacology, 2010, 20, 855-865.	0.7	74
142	IBIS: an OR ready open-source platform for image-guided neurosurgery. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 363-378.	2.8	74
143	Motion correction of multi-frame PET data in neuroreceptor mapping: Simulation based validation. NeuroImage, 2009, 47, 1496-1505.	4.2	73
144	Jacobian integration method increases the statistical power to measure gray matter atrophy in multiple sclerosis. NeuroImage: Clinical, 2014, 4, 10-17.	2.7	73

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145	Quantifying attention shifts in augmented reality imageâ€guided neurosurgery. Healthcare Technology Letters, 2017, 4, 188-192.	3.3	72
146	Abnormal effector and regulatory T cell subsets in paediatric-onset multiple sclerosis. Brain, 2019, 142, 617-632.	7.6	72
147	Regional brain atrophy in children with multiple sclerosis. NeuroImage, 2011, 58, 409-415.	4.2	71
148	A multi-modal approach to computer-assisted deep brain stimulation trajectory planning. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 687-704.	2.8	71
149	Subcortical Brain and Behavior Phenotypes Differentiate Infants With Autism Versus Language Delay. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2017, 2, 664-672.	1.5	71
150	Cortical Thickness, Cortico-Amygdalar Networks, and Externalizing Behaviors in Healthy Children. Biological Psychiatry, 2014, 75, 65-72.	1.3	70
151	Automatic Deformable MR-Ultrasound Registration for Image-Guided Neurosurgery. IEEE Transactions on Medical Imaging, 2015, 34, 366-380.	8.9	70
152	Clinical validation of vessel-based registration for correction of brain-shift. Medical Image Analysis, 2007, 11, 673-684.	11.6	69
153	Gradient distortions in MRI: Characterizing and correcting for their effects on SIENA-generated measures of brain volume change. NeuroImage, 2010, 49, 1601-1611.	4.2	68
154	Multi-contrast unbiased MRI atlas of a Parkinsonâ€™s disease population. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 329-341.	2.8	68
155	An Optimized PatchMatch for multi-scale and multi-feature label fusion. NeuroImage, 2016, 124, 770-782.	4.2	68
156	Computational Models of MRI Characteristics of Focal Cortical Dysplasia Improve Lesion Detection. NeuroImage, 2002, 17, 1755-1760.	4.2	67
157	DVV: A Taxonomy for Mixed Reality Visualization in Image Guided Surgery. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 332-352.	4.4	67
158	Longitudinal Trajectories of Brain Volume and Cortical Thickness in Treated and Untreated Primary Human Immunodeficiency Virus Infection. Clinical Infectious Diseases, 2018, 67, 1697-1704.	5.8	67
159	Comparison of pieceâ€wise linear, linear, and nonlinear atlasâ€toâ€patient warping techniques: Analysis of the labeling of subcortical nuclei for functional neurosurgical applications. Human Brain Mapping, 2009, 30, 3574-3595.	3.6	66
160	Sensitivity of voxel-based morphometry analysis to choice of imaging protocol at 3ÂT. NeuroImage, 2009, 44, 827-838.	4.2	66
161	A clinical-anatomical signature of Parkinson's disease identified with partial least squares and magnetic resonance imaging. NeuroImage, 2019, 190, 69-78.	4.2	66
162	New prototype neuronavigation system based on preoperative imaging and intraoperative freehand ultrasound: system description and validation. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 507-522.	2.8	65

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163	Striatal shape abnormalities as novel neurodevelopmental endophenotypes in schizophrenia: A longitudinal study. Human Brain Mapping, 2015, 36, 1458-1469.	3.6	65
164	MINC 2.0: A Flexible Format for Multi-Modal Images. Frontiers in Neuroinformatics, 2016, 10, 35.	2.5	65
165	Validation of ‹scp›T‹/scp›1wâ€based segmentations of white matter hyperintensity volumes in largeâ€scale datasets of aging. Human Brain Mapping, 2018, 39, 1093-1107.	3.6	65
166	Anatomical-Functional Correlative Analysis Of The Human Brain Using Three Dimensional Imaging Systems. Proceedings of SPIE, 1989, , .	0.8	64
167	Neuronavigation using susceptibility-weighted venography: application to deep brain stimulation and comparison with gadolinium contrast. Journal of Neurosurgery, 2014, 121, 131-141.	1.6	64
168	Changes in cognitive performance over a 1-year period in children and adolescents with multiple sclerosis.. Neuropsychology, 2013, 27, 210-219.	1.3	63
169	Assessing atrophy measurement techniques in dementia: Results from the MIRIAD atrophy challenge. NeuroImage, 2015, 123, 149-164.	4.2	63
170	Optimal location of thalamotomy lesions for tremor associated with Parkinson disease: a probabilistic analysis based on postoperative magnetic resonance imaging and an integrated digital atlas. Journal of Neurosurgery, 2002, 96, 854-866.	1.6	62
171	Trimmed-Likelihood Estimation for Focal Lesions and Tissue Segmentation in Multisequence MRI for Multiple Sclerosis. IEEE Transactions on Medical Imaging, 2011, 30, 1455-1467.	8.9	62
172	Multi-Modal Image Registration Based on Gradient Orientations of Minimal Uncertainty. IEEE Transactions on Medical Imaging, 2012, 31, 2343-2354.	8.9	62
173	An Evaluation of Depth Enhancing Perceptual Cues for Vascular Volume Visualization in Neurosurgery. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 391-403.	4.4	62
174	Lower physical activity is associated with higher disease burden in pediatric multiple sclerosis. Neurology, 2015, 85, 1663-1669.	1.1	62
175	Predictive model of spread of Parkinson's pathology using network diffusion. NeuroImage, 2019, 192, 178-194.	4.2	61
176	A stereotaxic, population-averaged T1w ovine brain atlas including cerebral morphology and tissue volumes. Frontiers in Neuroanatomy, 2015, 9, 69.	1.7	59
177	A CANDLE for a deeper in vivo insight. Medical Image Analysis, 2012, 16, 849-864.	11.6	58
178	Automated segmentation of basal ganglia and deep brain structures in MRI of Parkinsonâ€™s disease. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 99-110.	2.8	57
179	Temporally Consistent Probabilistic Detection of New Multiple Sclerosis Lesions in Brain MRI. IEEE Transactions on Medical Imaging, 2013, 32, 1490-1503.	8.9	56
180	Rotation-invariant multi-contrast non-local means for MS lesion segmentation. NeuroImage: Clinical, 2015, 8, 376-389.	2.7	56

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181	Automated quality control of brain MR images. Journal of Magnetic Resonance Imaging, 2008, 28, 308-319.	3.4	54
182	White matter hyperintensities are linked to future cognitive decline in de novo Parkinson's disease patients. NeuroImage: Clinical, 2018, 20, 892-900.	2.7	53
183	<title>Model-based segmentation of individual brain structures from MRI data</title>. , 1992, 1808, 10.		52
184	Detection of Alzheimer's disease signature in MR images seven years before conversion to dementia: Toward an early individual prognosis. Human Brain Mapping, 2015, 36, 4758-4770.	3.6	52
185	Predicting surgical outcome in temporal lobe epilepsy patients using MRI and MRSI. Neurology, 2002, 58, 1505-1512.	1.1	51
186	Local magnetization transfer ratio signal inhomogeneity is related to subsequent change in MTR in lesions and normal-appearing white-matter of multiple sclerosis patients. NeuroImage, 2005, 25, 1272-1278.	4.2	51
187	Accurate age classification of 6 and 12 month-old infants based on resting-state functional connectivity magnetic resonance imaging data. Developmental Cognitive Neuroscience, 2015, 12, 123-133.	4.0	51
188	Resting-state fMRI in sleeping infants more closely resembles adult sleep than adult wakefulness. PLoS ONE, 2017, 12, e0188122.	2.5	51
189	A longitudinal study of parentâ€reported sensory responsiveness in toddlers atâ€risk for autism. Journal of Child Psychology and Psychiatry and Allied Disciplines, 2019, 60, 314-324.	5.2	50
190	Multimodality image integration for stereotactic surgical planning. Medical Physics, 1991, 18, 167-177.	3.0	49
191	Nonlocal Intracranial Cavity Extraction. International Journal of Biomedical Imaging, 2014, 2014, 1-11.	3.9	49
192	The Role of the Cerebellum in Multiple Sclerosis. Cerebellum, 2015, 14, 364-374.	2.5	49
193	White matter in different regions evolves differently during progression to dementia. Neurobiology of Aging, 2019, 76, 71-79.	3.1	49
194	Nonrigid Registration of Ultrasound and MRI Using Contextual Conditioned Mutual Information. IEEE Transactions on Medical Imaging, 2014, 33, 708-725.	8.9	48
195	Automatic non-linear MRI-ultrasound registration for the correction of intra-operative brain deformations. Computer Aided Surgery, 2004, 9, 123-136.	1.8	47
196	A geometric flow for segmenting vasculature in proton-density weighted MRI. Medical Image Analysis, 2008, 12, 497-513.	11.6	47
197	Towards accurate, robust and practical ultrasound-CT registration of vertebrae for image-guided spine surgery. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 523-537.	2.8	46
198	Multicontrast multiecho FLASH MRI for targeting the subthalamic nucleus. Magnetic Resonance Imaging, 2012, 30, 627-640.	1.8	44

#	Article	IF	Citations
199	Sex-specific associations of testosterone with prefrontal-hippocampal development and executive function. Psychoneuroendocrinology, 2017, 76, 206-217.	2.7	44
200	Deformation based morphometry study of longitudinal MRI changes in behavioral variant frontotemporal dementia. NeuroImage: Clinical, 2019, 24, 102079.	2.7	44
201	<title>Automated 3D nonlinear deformation procedure for determination of gross morphometric variability in human brain</title>. , 1994, , .		43
202	Rapid automatic segmentation of the human cerebellum and its lobules (RASCAL)â€”Implementation and application of the patchâ€based labelâ€fusion technique with a template library to segment the human cerebellum. Human Brain Mapping, 2014, 35, 5026-5039.	3.6	43
203	Reduced hippocampal volume and hypothalamusâ€“pituitaryâ€“adrenal axis function in first episode psychosis: Evidence for sex differences. NeuroImage: Clinical, 2015, 7, 195-202.	2.7	43
204	Trajectories of cortical surface area and cortical volume maturation in normal brain development. Data in Brief, 2015, 5, 929-938.	1.0	43
205	Monophasic demyelination reduces brain growth in children. Neurology, 2017, 88, 1744-1750.	1.1	43
206	CerebrA, registration and manual label correction of Mindboggle-101 atlas for MNI-ICBM152 template. Scientific Data, 2020, 7, 237.	5.3	43
207	Regional impact of field strength on voxelâ€based morphometry results. Human Brain Mapping, 2010, 31, 943-957.	3.6	42
208	A surfaceâ€in gradient of thalamic damage evolves in pediatric multiple sclerosis. Annals of Neurology, 2019, 85, 340-351.	5.3	42
209	Open science datasets from PREVENT-AD, a longitudinal cohort of pre-symptomatic Alzheimerâ€™s disease. NeuroImage: Clinical, 2021, 31, 102733.	2.7	42
210	The BigBrainWarp toolbox for integration of BigBrain 3D histology with multimodal neuroimaging. ELife, 2021, 10, .	6.0	42
211	Surface-based analysis reveals regions of reduced cortical magnetization transfer ratio in patients with multiple sclerosis: A proposed method for imaging subpial demyelination. Human Brain Mapping, 2014, 35, 3402-3413.	3.6	41
212	Investigation of morphometric variability of subthalamic nucleus, red nucleus, and substantia nigra in advanced Parkinson's disease patients using automatic segmentation and PCAâ€based analysis. Human Brain Mapping, 2014, 35, 4330-4344.	3.6	41
213	Deficit in Central Auditory Processing as a Biomarker of Pre-Clinical Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2017, 60, 1589-1600.	2.6	41
214	Subjective Cognitive Decline Is Associated With Altered Default Mode Network Connectivity in Individuals With a Family History of Alzheimerâ€™s Disease. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2018, 3, 463-472.	1.5	41
215	HIV infection and cerebral small vessel disease are independently associated with brain atrophy and cognitive impairment. Aids, 2019, 33, 1197-1205.	2.2	41
216	Gross Anatomy of the Corpus Callosum in Alzheimerâ€™s Disease: Regions of Degeneration and Their Neuropsychological Correlates. Dementia and Geriatric Cognitive Disorders, 2007, 23, 96-103.	1.5	40

#	Article	IF	Citations
217	Cortical constraints for non-linear cortical registration. Lecture Notes in Computer Science, 1996, , 307-316.	1.3	39
218	Comparing two approaches to rigid registration of three-dimensional ultrasound and magnetic resonance images for neurosurgery. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 125-136.	2.8	39
219	An accurate registration of the BigBrain dataset with the MNI PD25 and ICBM152 atlases. Scientific Data, 2019, 6, 210.	5.3	39
220	Stereotactic neurosurgery planning on a personal-computer-based work station. Journal of Digital Imaging, 1989, 2, 75-81.	2.9	38
221	Automatic Detection of Gadolinium-Enhancing Multiple Sclerosis Lesions in Brain MRI Using Conditional Random Fields. IEEE Transactions on Medical Imaging, 2012, 31, 1181-1194.	8.9	38
222	Contribution of the cerebellum to cognitive performance in children and adolescents with multiple sclerosis. Multiple Sclerosis Journal, 2016, 22, 599-607.	3.0	38
223	Age-related volumetric change of limbic structures and subclinical anxious/depressed symptomatology in typically developing children and adolescents. Biological Psychology, 2017, 124, 133-140.	2.2	38
224	Voxel-based modeling and quantification of the proximal femur using inter-subject registration of quantitative CT images. Bone, 2007, 41, 888-895.	2.9	37
225	Language delay aggregates in toddler siblings of children with autism spectrum disorder. Journal of Neurodevelopmental Disorders, 2018, 10, 29.	3.1	37
226	The relationship between brain atrophy and cognitive-behavioural symptoms in retired Canadian football players with multiple concussions. NeuroImage: Clinical, 2018, 19, 551-558.	2.7	37
227	Morphometric network differences in ageing versus Alzheimerâ€™s disease dementia. Brain, 2020, 143, 635-649.	7.6	37
228	Morphometric Changes of the Corpus Callosum in Congenital Blindness. PLoS ONE, 2014, 9, e107871.	2.5	37
229	Non-linear cerebral registration with sulcal constraints. Lecture Notes in Computer Science, 1998, , 974-984.	1.3	36
230	Hierarchical Probabilistic Gabor and MRF Segmentation of Brain Tumours in MRI Volumes. Lecture Notes in Computer Science, 2013, 16, 751-758.	1.3	36
231	Splenium development and early spoken language in human infants. Developmental Science, 2017, 20, e12360.	2.4	36
232	Brain Shift in Neuronavigation of Brain Tumors: An Updated Review of Intra-Operative Ultrasound Applications. Frontiers in Oncology, 2020, 10, 618837.	2.8	36
233	Nonlocal Patch-Based Label Fusion for Hippocampus Segmentation. Lecture Notes in Computer Science, 2010, 13, 129-136.	1.3	36
234	Quantification of accuracy of the automated nonlinear image matching and anatomical labeling (ANIMAL) nonlinear registration algorithm for 4D CT images of lung. Medical Physics, 2007, 34, 4409-4421.	3.0	35

#	Article	IF	Citations
235	Appearance-based modeling for segmentation of hippocampus and amygdala using multi-contrast MR imaging. NeuroImage, 2011, 58, 549-559.	4.2	35
236	Quantitative Magnetic Resonance Imaging of Cortical Multiple Sclerosis Pathology. Multiple Sclerosis International, 2012, 2012, 1-13.	0.8	35
237	A comparison of accurate automatic hippocampal segmentation methods. NeuroImage, 2017, 155, 383-393.	4.2	35
238	Warping an atlas derived from serial histology to 5 high-resolution MRIs. Scientific Data, 2018, 5, 180107.	5.3	35
239	Comparison of Multiple Sclerosis Cortical Lesion Types Detected by Multicontrast 3T and 7T MRI. American Journal of Neuroradiology, 2019, 40, 1162-1169.	2.4	34
240	Amnestic MCI future clinical status prediction using baseline MRI features. Neurobiology of Aging, 2010, 31, 1606-1617.	3.1	33
241	Development of cortical shape in the human brain from 6 to 24months of age via a novel measure of shape complexity. NeuroImage, 2016, 135, 163-176.	4.2	33
242	The impact of automated hippocampal volumetry on diagnostic confidence in patients with suspected Alzheimer's disease: A European Alzheimer's Disease Consortium study. Alzheimer's and Dementia, 2017, 13, 1013-1023.	0.8	33
243	Evidence for a cerebral cortical thickness network anti-correlated with amygdalar volume in healthy youths: Implications for the neural substrates of emotion regulation. NeuroImage, 2013, 71, 42-49.	4.2	32
244	Morphometric MRI as a diagnostic biomarker of frontotemporal dementia: A systematic review to determine clinical applicability. NeuroImage: Clinical, 2018, 20, 685-696.	2.7	32
245	White Matter Hyperintensities Mediate Impact of Dysautonomia on Cognition in Parkinson's Disease. Movement Disorders Clinical Practice, 2020, 7, 639-647.	1.5	32
246	Deformable registration of preoperative MR, pre-resection ultrasound, and post-resection ultrasound images of neurosurgery. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1017-1028.	2.8	31
247	Optimized PatchMatch for Near Real Time and Accurate Label Fusion. Lecture Notes in Computer Science, 2014, 17, 105-112.	1.3	31
248	Investigating the relation between striatal volume and IQ. Brain Imaging and Behavior, 2014, 8, 52-59.	2.1	30
249	Neuroanatomical correlates of behavioral rating versus performance measures of working memory in typically developing children and adolescents.. Neuropsychology, 2015, 29, 82-91.	1.3	30
250	Test-retest resting-state fMRI in healthy elderly persons with a family history of Alzheimerâ€™s disease. Scientific Data, 2015, 2, 150043.	5.3	30
251	Amyloid and Tau Pathology Associations With Personality Traits, Neuropsychiatric Symptoms, and Cognitive Lifestyle in the Preclinical Phases of Sporadic and Autosomal Dominant Alzheimerâ€™s Disease. Biological Psychiatry, 2021, 89, 776-785.	1.3	30
252	Network structure and transcriptomic vulnerability shape atrophy in frontotemporal dementia. Brain, 2023, 146, 321-336.	7.6	30

#	Article	IF	Citations
253	Geometric Flows for Segmenting Vasculature in MRI: Theory and Validation. Lecture Notes in Computer Science, 2004, , 500-507.	1.3	29
254	A realistic phantom for brain-shift simulations. Medical Physics, 2006, 33, 3234-3240.	3.0	29
255	Adaptive prior probability and spatial temporal intensity change estimation for segmentation of the one-year-old human brain. Journal of Neuroscience Methods, 2013, 212, 43-55.	2.5	29
256	Near Real-Time Robust Non-rigid Registration of Volumetric Ultrasound Images for Neurosurgery. Ultrasound in Medicine and Biology, 2015, 41, 574-587.	1.5	29
257	Joint level-set shape modeling and appearance modeling for brain structure segmentation. NeuroImage, 2007, 36, 672-683.	4.2	28
258	Cyberinfrastructure for Open Science at the Montreal Neurological Institute. Frontiers in Neuroinformatics, 2016, 10, 53.	2.5	28
259	White matter hyperintensities and neuropsychiatric symptoms in mild cognitive impairment and Alzheimerâ€™s disease. NeuroImage: Clinical, 2020, 28, 102367.	2.7	28
260	Multi-site study of surgical practice in neurosurgery based on surgical process models. Journal of Biomedical Informatics, 2013, 46, 822-829.	4.3	27
261	Interplay of hippocampal volume and hypothalamus-pituitary-adrenal axis function as markers of stress vulnerability in men at ultra-high risk for psychosis. Psychological Medicine, 2017, 47, 471-483.	4.5	27
262	Dehydroepiandrosterone impacts working memory by shaping cortico-hippocampal structural covariance during development. Psychoneuroendocrinology, 2017, 86, 110-121.	2.7	27
263	Combining intraoperative ultrasound brain shift correction and augmented reality visualizations: a pilot study of eight cases. Journal of Medical Imaging, 2018, 5, 1.	1.5	27
264	Automated Estimation of Brain Volume in Multiple Sclerosis with BICCR. Lecture Notes in Computer Science, 2001, , 141-147.	1.3	27
265	Automatic Non-linear MRI-Ultrasound Registration for the Correction of Intra-operative Brain Deformations. Lecture Notes in Computer Science, 2001, , 913-922.	1.3	26
266	An automatic geometrical and statistical method to detect acoustic shadows in intraoperative ultrasound brain images. Medical Image Analysis, 2010, 14, 195-204.	11.6	26
267	Creation of Computerized 3D MRI-Integrated Atlases of the Human Basal Ganglia and Thalamus. Frontiers in Systems Neuroscience, 2011, 5, 71.	2.5	26
268	An anthropomorphic polyvinyl alcohol brain phantom based on Colin27 for use in multimodal imaging. Medical Physics, 2012, 39, 554-561.	3.0	26
269	Probabilistic Multiple Sclerosis Lesion Classification Based on Modeling Regional Intensity Variability and Local Neighborhood Information. IEEE Transactions on Biomedical Engineering, 2015, 62, 1281-1292.	4.2	26
270	Assessment of a prognostic MRI biomarker in early de novo Parkinson's disease. NeuroImage: Clinical, 2019, 24, 101986.	2.7	26

#	Article	IF	Citations
271	The temporal relationships between white matter hyperintensities, neurodegeneration, amyloid beta, and cognition. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2020, 12, e12091.	2.4	26
272	Bundle-specific associations between white matter microstructure and AÎ² and tau pathology in preclinical Alzheimerâ€™s disease. ELife, 2021, 10, .	6.0	26
273	<title>Model-based 3-D segmentation of multiple sclerosis lesions in dual-echo MRI data</title>. , 1992, , .		25
274	Magnetic Resonance Imaging Predictors of Executive Functioning in Patients with Pediatric-Onset Multiple Sclerosis. Archives of Clinical Neuropsychology, 2012, 27, 495-509.	0.5	25
275	Registering Pre- and Postresection 3-Dimensional Ultrasound for Improved Visualization of Residual Brain Tumor. Ultrasound in Medicine and Biology, 2013, 39, 16-29.	1.5	25
276	The Importance of Temperament for Understanding Early Manifestations of Autism Spectrum Disorder in High-Risk Infants. Journal of Autism and Developmental Disorders, 2019, 49, 2849-2863.	2.7	25
277	Cortical and subcortical T1 white/gray contrast, chronological age, and cognitive performance. NeuroImage, 2019, 196, 276-288.	4.2	25
278	Tight Coupling between Morphological Features of the Central Sulcus and Somatomotor Body Representations: A Combined Anatomical and Functional MRI Study. Cerebral Cortex, 2020, 30, 1843-1854.	2.9	25
279	Newborn amygdalar volumes are associated with maternal prenatal psychological distress in a sex-dependent way. NeuroImage: Clinical, 2020, 28, 102380.	2.7	25
280	MR-based neurological disease classification methodology: Application to lateralization of seizure focus in temporal lobe epilepsy. NeuroImage, 2006, 29, 557-566.	4.2	24
281	Design, construction, and validation of an MRI-compatible vibrotactile stimulator intended for clinical use. Journal of Neuroscience Methods, 2009, 184, 129-135.	2.5	24
282	Memory Performance and Normalized Regional Brain Volumes in Patients with Pediatric-Onset Multiple Sclerosis. Journal of the International Neuropsychological Society, 2012, 18, 471-480.	1.8	24
283	Ultrasound-CT registration of vertebrae without reconstruction. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 901-909.	2.8	24
284	An analysis of tracking error in image-guided neurosurgery. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1579-1588.	2.8	24
285	Predicting Clinical Variable from MRI Features: Application to MMSE in MCI. Lecture Notes in Computer Science, 2005, 8, 392-399.	1.3	24
286	Fast rigid registration of pre-operative magnetic resonance images to intra-operative ultrasound for neurosurgery based on high confidence gradient orientations. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 649-661.	2.8	23
287	Establishing Magnetic Resonance Images Orientation for the EADCâ€ADNI Manual Hippocampal Segmentation Protocol. Journal of Neuroimaging, 2014, 24, 509-514.	2.0	23
288	The developmental relationship between DHEA and visual attention is mediated by structural plasticity of cortico-amygdalar networks. Psychoneuroendocrinology, 2016, 70, 122-133.	2.7	23

#	Article	IF	Citations
289	Statistics for Investigation of Multimodal MR Imaging Data and an Application to Multiple Sclerosis Patients. , 1996, 9, 339-346.		22
290	Preoperative functional magnetic resonance imaging assessment of higher-order cognitive function in patients undergoing surgery for brain tumors. Journal of Neurosurgery, 2008, 108, 258-268.	1.6	22
291	White matter microstructure is associated with hyperactive/inattentive symptomatology and polygenic risk for attention-deficit/hyperactivity disorder in a population-based sample of adolescents. Neuropsychopharmacology, 2019, 44, 1597-1603.	5.4	22
292	Cerebral atrophy in amyotrophic lateral sclerosis parallels the pathological distribution of TDP43. Brain Communications, 2020, 2, fcaa061.	3.3	22
293	MARIN: an open-source mobile augmented reality interactive neuronavigation system. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 1013-1021.	2.8	22
294	The Longitudinal Assessment of Neuropsychiatric Symptoms in Mild Cognitive Impairment and Alzheimerâ€™s Disease and Their Association With White Matter Hyperintensities in the National Alzheimerâ€™s Coordinating Centerâ€™s Uniform Data Set. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2021, 6, 70-78.	1.5	22
295	White matter hyperintensities are associated with grey matter atrophy and cognitive decline in Alzheimer's disease and frontotemporal dementia. Neurobiology of Aging, 2022, 111, 54-63.	3.1	22
296	Augmented reality visualization for guidance in neurovascular surgery. Studies in Health Technology and Informatics, 2012, 173, 225-9.	0.3	22
297	Axonal Damage in Multiple Sclerosis Patients with High versus Low Expanded Disability Status Scale Score. Canadian Journal of Neurological Sciences, 2004, 31, 225-228.	0.5	21
298	Improving recorded volume in mesial temporal lobe by optimizing stereotactic intracranial electrode implantation planning. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1599-1615.	2.8	21
299	Impaired growth of the cerebellum in pediatric-onset acquired CNS demyelinating disease. Multiple Sclerosis Journal, 2016, 22, 1266-1278.	3.0	21
300	The Consortium for the early identification of Alzheimer's diseaseâ€“Quebec (CIMAâ€Q). Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2019, 11, 787-796.	2.4	21
301	Accurate and robust segmentation of neuroanatomy in T1â€weighted MRI by combining spatial priors with deep convolutional neural networks. Human Brain Mapping, 2020, 41, 309-327.	3.6	21
302	Partial Support for an Interaction Between a Polygenic Risk Score for Major Depressive Disorder and Prenatal Maternal Depressive Symptoms on Infant Right Amygdalar Volumes. Cerebral Cortex, 2020, 30, 6121-6134.	2.9	21
303	Multiple Sclerosis Lesion Segmentation Using an Automatic Multimodal Graph Cuts. Lecture Notes in Computer Science, 2009, 12, 584-591.	1.3	21
304	Appearance-Based Segmentation of Medial Temporal Lobe Structures. NeuroImage, 2002, 17, 515-531.	4.2	21
305	Nonlocal regularization for active appearance model: Application to medial temporal lobe segmentation. Human Brain Mapping, 2014, 35, 377-395.	3.6	20
306	Altered resting-state functional connectivity in cognitively preserved pediatric-onset MS patients and relationship to structural damage and cognitive performance. Multiple Sclerosis Journal, 2016, 22, 792-800.	3.0	20

#	Article	IF	Citations
307	The state-of-the-art in ultrasound-guided spine interventions. Medical Image Analysis, 2020, 65, 101769.	11.6	20
308	Automated Analysis of Multi Site MRI Phantom Data for the NIHPD Project. Lecture Notes in Computer Science, 2006, 9, 144-151.	1.3	20
309	Automatic non-linear MRI-ultrasound registration for the correction of intra-operative brain deformations. Computer Aided Surgery, 2004, 9, 123-136.	1.8	20
310	Bayesian MS Lesion Classification Modeling Regional and Local Spatial Information. , 2006, , .		19
311	Towards a Multi-modal Atlas for Neurosurgical Planning. Lecture Notes in Computer Science, 2006, 9, 389-396.	1.3	19
312	Local Correlation Between Monte-Carlo Dose and Radiation-Induced Fibrosis in Lung Cancer Patients. International Journal of Radiation Oncology Biology Physics, 2008, 70, 921-930.	0.8	19
313	Non-Local Means Inpainting of MS Lesions in Longitudinal Image Processing. Frontiers in Neuroscience, 2015, 9, 456.	2.8	19
314	Proximity to Parental Symptom Onset and Amyloid-Î² Burden in Sporadic Alzheimer Disease. JAMA Neurology, 2018, 75, 608.	9.0	19
315	Neuroanatomical changes in white and grey matter after sleeve gastrectomy. NeuroImage, 2020, 213, 116696.	4.2	19
316	Quantitative trait variation in ASD probands and toddler sibling outcomes at 24â€‰months. Journal of Neurodevelopmental Disorders, 2020, 12, 5.	3.1	18
317	Automatic identificaiton of cortical sulci using a 3D probabilistic atlas. Lecture Notes in Computer Science, 1998, , 509-518.	1.3	17
318	Validation of a hybrid Doppler ultrasound vessel-based registration algorithm for neurosurgery. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 667-685.	2.8	17
319	Patch-based label fusion segmentation of brainstem structures with dual-contrast MRI for Parkinsonâ€™s disease. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1029-1041.	2.8	17
320	Temporal Hierarchical Adaptive Texture CRF for Automatic Detection of Gadolinium-Enhancing Multiple Sclerosis Lesions in Brain MRI. IEEE Transactions on Medical Imaging, 2015, 34, 1227-1241.	8.9	17
321	Atrophy in white matter fiber tracts in multiple sclerosis is not dependent on tract length or local white matter lesions. Multiple Sclerosis Journal, 2008, 14, 779-785.	3.0	16
322	MRI and cognitive scores complement each other to accurately predict Alzheimer's dementia 2 to 7 years before clinical onset. NeuroImage: Clinical, 2020, 25, 102121.	2.7	16
323	Vessel Driven Correction of Brain Shift. Lecture Notes in Computer Science, 2004, , 208-216.	1.3	16
324	Regional brain atrophy and cognitive decline depend on definition of subjective cognitive decline. NeuroImage: Clinical, 2022, 33, 102923.	2.7	16

#	Article	IF	Citations
325	Statistical Analysis of Longitudinal MRI Data: Applications for Detection of Disease Activity in MS. Lecture Notes in Computer Science, 2002, , 363-371.	1.3	15
326	Clustering of atlas-defined cortical regions based on relaxation times and proton density. NeuroImage, 2009, 47, 523-532.	4.2	15
327	Validation of automated ultrasound-CT registration of vertebrae. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 601-610.	2.8	15
328	BISON: Brain tissue segmentation pipeline using T₁â€weighted magnetic resonance images and a random forest classifier. Magnetic Resonance in Medicine, 2021, 85, 1881-1894.	3.0	15
329	Improved Precision in the Measurement of Longitudinal Global and Regional Volumetric Changes via a Novel MRI Gradient Distortion Characterization and Correction Technique. Lecture Notes in Computer Science, 2010, , 324-333.	1.3	15
330	Animal. , 1999, , 133-142.		15
331	Human Brain Myelination from Birth to 4.5 Years. Lecture Notes in Computer Science, 2008, 11, 180-187.	1.3	14
332	Automatic SWI Venography Segmentation Using Conditional Random Fields. IEEE Transactions on Medical Imaging, 2015, 34, 2478-2491.	8.9	14
333	â€œIf He Has it, We Know What to Doâ€: Parent Perspectives on Familial Risk for Autism Spectrum Disorder. Journal of Pediatric Psychology, 2020, 45, 121-130.	2.1	14
334	Object-Based Strategy for Morphometry of the Cerebral Cortex. Lecture Notes in Computer Science, 2003, 18, 160-171.	1.3	14
335	Atlas-Based Segmentation of the Subthalamic Nucleus, Red Nucleus, and Substantia Nigra for Deep Brain Stimulation by Incorporating Multiple MRI Contrasts. Lecture Notes in Computer Science, 2012, , 135-145.	1.3	14
336	A Realistic Test and Development Environment for Mixed Reality in Neurosurgery. Lecture Notes in Computer Science, 2012, , 13-23.	1.3	14
337	Integration of Stereoscopic DSA with Three-Dimensional Image Reconstruction for Stereotactic Planning. Stereotactic and Functional Neurosurgery, 1990, 54, 471-476.	1.5	13
338	Robust S1, S2, and thalamic activations in individual subjects with vibrotactile stimulation at 1.5 and 3.0 T. Human Brain Mapping, 2009, 30, 1328-1337.	3.6	13
339	Anatomical and Electrophysiological Validation of an Atlas for Neurosurgical Planning. Lecture Notes in Computer Science, 2005, 8, 394-401.	1.3	13
340	White matter lesions may be an early marker for age-related cognitive decline. NeuroImage: Clinical, 2022, 35, 103096.	2.7	13
341	Involvement of the Amygdala in Memory and Psychosocial Functioning in Pediatric-Onset Multiple Sclerosis. Developmental Neuropsychology, 2018, 43, 524-534.	1.4	12
342	Toward real-time rigid registration of intra-operative ultrasound with preoperative CT images for lumbar spinal fusion surgery. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1933-1943.	2.8	12

#	Article	IF	Citations
343	Conversion of diffusely abnormal white matter to focal lesions is linked to progression in secondary progressive multiple sclerosis. Multiple Sclerosis Journal, 2021, 27, 208-219.	3.0	12
344	Relationship between impulsivity, uncontrolled eating and body mass index: a hierarchical model. International Journal of Obesity, 2022, 46, 129-136.	3.4	12
345	Bayesian Classification of Multiple Sclerosis Lesions in Longitudinal MRI Using Subtraction Images. Lecture Notes in Computer Science, 2010, 13, 290-297.	1.3	11
346	User-friendly freehand ultrasound calibration using Lego bricks and automatic registration. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 1703-1711.	2.8	11
347	White matter degeneration profile in the cognitive corticoâ€subcortical tracts in Parkinson's disease. Movement Disorders, 2018, 33, 1139-1150.	3.9	11
348	Gestureâ€based registration correction using a mobile augmented reality imageâ€guided neurosurgery system. Healthcare Technology Letters, 2018, 5, 137-142.	3.3	11
349	Detection and clinical correlation of leukocortical lesions in pediatric-onset multiple sclerosis on multi-contrast MRI. Multiple Sclerosis Journal, 2019, 25, 980-986.	3.0	11
350	Brain volume loss in individuals over time: Source of variance and limits of detectability. NeuroImage, 2020, 214, 116737.	4.2	11
351	Automated separation of diffusely abnormal white matter from focal white matter lesions on MRI in multiple sclerosis. NeuroImage, 2020, 213, 116690.	4.2	11
352	Maximum a Posteriori Local Histogram Estimation for Image Registration. Lecture Notes in Computer Science, 2005, 8, 163-170.	1.3	11
353	Deformable Ultrasound Registration without Reconstruction. Lecture Notes in Computer Science, 2008, 11, 1023-1031.	1.3	11
354	Three-Dimensional Interactive Display of Medical Images For Stereotactic Neurosurgery Planning. Proceedings of SPIE, 1989, 1092, 67.	0.8	10
355	Interhemispheric coupling improves the brainâ€™s ability to perform low cognitive demand tasks in Alzheimerâ€™s disease and high cognitive demand tasks in normal aging.. Neuropsychology, 2013, 27, 464-480.	1.3	10
356	Parent Support of Preschool Peer Relationships in Younger Siblings of Children with Autism Spectrum Disorder. Journal of Autism and Developmental Disorders, 2018, 48, 1122-1132.	2.7	10
357	The Canadian Dementia Imaging Protocol: Harmonization validity for morphometry measurements. NeuroImage: Clinical, 2019, 24, 101943.	2.7	10
358	Sexâ€specific association between infant caudate volumes and a polygenic risk score for major depressive disorder. Journal of Neuroscience Research, 2020, 98, 2529-2540.	2.9	10
359	MRI data-driven algorithm for the diagnosis of behavioural variant frontotemporal dementia. Journal of Neurology, Neurosurgery and Psychiatry, 2021, 92, 608-616.	1.9	10
360	Self-similarity Weighted Mutual Information: A New Nonrigid Image Registration Metric. Lecture Notes in Computer Science, 2012, 15, 91-98.	1.3	10

#	Article	IF	Citations
361	A sub+cortical fMRIâ€based surface parcellation. Human Brain Mapping, 2022, 43, 616-632.	3.6	10
362	Three-dimensional display of cortical anatomy and vasculature: Magnetic resonance angiography versus multimodality integration. Journal of Digital Imaging, 1991, 4, 21-27.	2.9	9
363	Developmental trajectories of neuroanatomical alterations associated with the 16p11.2 Copy Number Variations. NeuroImage, 2019, 203, 116155.	4.2	9
364	Creating a Comprehensive Research Platform for Surgical Technique and Operative Outcome in Primary Brain Tumor Neurosurgery. World Neurosurgery, 2020, 144, e62-e71.	1.3	9
365	Pupil dilation during orienting of attention and conscious detection of visual targets in patients with left spatial neglect. Cortex, 2021, 134, 265-277.	2.4	9
366	Augmented Reality in Neurovascular Surgery: First Experiences. Lecture Notes in Computer Science, 2014, , 80-89.	1.3	9
367	Interaction-Based Registration Correction for Improved Augmented Reality Overlay in Neurosurgery. Lecture Notes in Computer Science, 2015, , 21-29.	1.3	9
368	A Multi-scale Geometric Flow for Segmenting Vasculature in MRI. Lecture Notes in Computer Science, 2004, , 169-180.	1.3	9
369	DVV: Towards a Taxonomy for Mixed Reality Visualization in Image Guided Surgery. Lecture Notes in Computer Science, 2010, , 334-343.	1.3	9
370	Simultaneous Segmentation and Grading of Hippocampus for Patient Classification with Alzheimerâ€™s Disease. Lecture Notes in Computer Science, 2011, 14, 149-157.	1.3	9
371	Spatio-Temporal Regularization for Longitudinal Registration to Subject-Specific 3d Template. PLoS ONE, 2015, 10, e0133352.	2.5	9
372	PRISM: An open source framework for the interactive design of GPU volume rendering shaders. PLoS ONE, 2018, 13, e0193636.	2.5	9
373	Ventricular features as reliable differentiators between bvFTD and other dementias. NeuroImage: Clinical, 2022, 33, 102947.	2.7	9
374	A Volume of Interest (VOI) Atlas for the Analysis of Neurophysiological Image Data. , 1989, , .		8
375	3D Moment Invariant Based Morphometry. Lecture Notes in Computer Science, 2003, , 505-512.	1.3	8
376	Augmented Reality for Specific Neurovascular Surgical Tasks. Lecture Notes in Computer Science, 2015, , 92-103.	1.3	8
377	Towards Augmented Reality Guided Craniotomy Planning in Tumour Resections. Lecture Notes in Computer Science, 2016, , 163-174.	1.3	8
378	Preclinical in vivo longitudinal assessment of KG207-M as a disease-modifying Alzheimerâ€™s disease therapeutic. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 788-801.	4.3	8

#	Article	IF	Citations
379	Regional Cerebellar Volume Loss Predicts Future Disability in Multiple Sclerosis Patients. Cerebellum, 2022, 21, 632-646.	2.5	8
380	A voxel-wise assessment of growth differences in infants developing autism spectrum disorder. NeuroImage: Clinical, 2021, 29, 102551.	2.7	8
381	Hierarchical Multimodal Image Registration Based on Adaptive Local Mutual Information. Lecture Notes in Computer Science, 2010, 13, 643-651.	1.3	8
382	Towards Computer-Assisted Deep Brain Stimulation Targeting with Multiple Active Contacts. Lecture Notes in Computer Science, 2012, 15, 487-494.	1.3	8
383	Adaptive Voxel, Texture and Temporal Conditional Random Fields for Detection of Gad-Enhancing Multiple Sclerosis Lesions in Brain MRI. Lecture Notes in Computer Science, 2013, 16, 543-550.	1.3	8
384	Detection of Gad-Enhancing Lesions in Multiple Sclerosis Using Conditional Random Fields. Lecture Notes in Computer Science, 2010, 13, 41-48.	1.3	8
385	Three-dimensional reconstruction of serial histological mouse brain sections. , 2008, , .		7
386	Towards Accurate, Automatic Segmentation of the Hippocampus and Amygdala from MRI. Lecture Notes in Computer Science, 2009, 12, 592-600.	1.3	7
387	New Protocol for Skin Landmark Registration in Image-Guided Neurosurgery. Operative Neurosurgery, 2015, 11, 376-381.	0.8	7
388	Cognitive and Behavioral Functioning in Childhood Acquired Demyelinating Syndromes. Journal of the International Neuropsychological Society, 2016, 22, 1050-1060.	1.8	7
389	Towards Automatic Collateral Circulation Score Evaluation in Ischemic Stroke Using Image Decompositions and Support Vector Machines. Lecture Notes in Computer Science, 2017, , 158-167.	1.3	7
390	The EADC-ADNI harmonized protocol for hippocampal segmentation: AÂvalidation study. NeuroImage, 2018, 181, 142-148.	4.2	7
391	Spine and Individual Vertebrae Segmentation in Computed Tomography Images Using Geometric Flows and Shape Priors. Frontiers in Computer Science, 2021, 3, .	2.8	7
392	Fast and Robust Registration Based on Gradient Orientations: Case Study Matching Intra-operative Ultrasound to Pre-operative MRI in Neurosurgery. Lecture Notes in Computer Science, 2012, , 125-134.	1.3	7
393	DARQ: Deep learning of quality control for stereotaxic registration of human brain MRI to the T1w MNI-ICBM 152 template. NeuroImage, 2022, 257, 119266.	4.2	7
394	Estimating medical image registration error and confidence: A taxonomy and scoping review. Medical Image Analysis, 2022, 81, 102531.	11.6	7
395	A new template to study callosal growth shows specific growth in anterior and posterior regions of the corpus callosum in early childhood. European Journal of Neuroscience, 2015, 42, 1675-1684.	2.6	6
396	Distance sonification in imageâ€guided neurosurgery. Healthcare Technology Letters, 2017, 4, 199-203.	3.3	6

#	Article	IF	Citations
397	Improving the SIENA performance using BEaST brain extraction. PLoS ONE, 2018, 13, e0196945.	2.5	6
398	Automatic extraction of vertebral landmarks from ultrasound images: A pilot study. Computers in Biology and Medicine, 2020, 122, 103838.	7.0	6
399	A variation in the infant oxytocin receptor gene modulates infant hippocampal volumes in association with sex and prenatal maternal anxiety. Psychiatry Research - Neuroimaging, 2021, 307, 111207.	1.8	6
400	Anatomically Constrained Weak Classifier Fusion for Early Detection of Alzheimerâ€™s Disease. Lecture Notes in Computer Science, 2014, , 141-148.	1.3	6
401	An Anthropomorphic Polyvinyl Alcohol Triple-Modality Brain Phantom Based on Colin27. Lecture Notes in Computer Science, 2010, 13, 92-100.	1.3	6
402	Allometry in the corpus callosum in neonates: Sexual dimorphism. Human Brain Mapping, 0, , .	3.6	6
403	The relation of focal white matter signal abnormality and focal volume loss in multiple sclerosis. Multiple Sclerosis Journal, 2007, 13, 809-813.	3.0	5
404	An augmented-reality system prototype for guiding transcranial Doppler ultrasound examination. Multimedia Tools and Applications, 2018, 77, 27789-27805.	3.9	5
405	The hippocampal-to-ventricle ratio (HVR): Presentation of a manual segmentation protocol and preliminary evidence. NeuroImage, 2019, 203, 116108.	4.2	5
406	Cognitive load associations when utilizing auditory display within image-guided neurosurgery. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1431-1438.	2.8	5
407	Fast Registration of CT with Intra-operative Ultrasound Images for Spine Surgery. Lecture Notes in Computer Science, 2019, , 29-40.	1.3	5
408	Interaction Driven Enhancement of Depth Perception in Angiographic Volumes. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 2247-2257.	4.4	5
409	Evaluation of an Ultrasound-Based Navigation System for Spine Neurosurgery: A Porcine Cadaver Study. Frontiers in Oncology, 2021, 11, 619204.	2.8	5
410	Neonatal amygdala volumes and the development of self-regulation from early infancy to toddlerhood.. Neuropsychology, 2021, 35, 285-299.	1.3	5
411	MNI-FTD templates, unbiased average templates of frontotemporal dementia variants. Scientific Data, 2021, 8, 222.	5.3	5
412	A Generative Model for Automatic Detection of Resolving Multiple Sclerosis Lesions. Lecture Notes in Computer Science, 2014, , 118-129.	1.3	5
413	Tuning and Comparing Spatial Normalization Methods. Lecture Notes in Computer Science, 2003, , 910-917.	1.3	5
414	Rigid Registration of 3D Ultrasound and MRI: Comparing Two Approaches on Nine Tumor Cases. Advances in Intelligent and Soft Computing, 2010, , 33-43.	0.2	5

#	Article	IF	Citations
415	A Prospective Evaluation of Computer-Assisted Deep Brain Stimulation Trajectory Planning. Lecture Notes in Computer Science, 2013, , 42-49.	1.3	5
416	Segmentation of Cortical MS Lesions on MRI Using Automated Laminar Profile Shape Analysis. Lecture Notes in Computer Science, 2010, 13, 181-188.	1.3	5
417	Diffusely abnormal white matter converts to T2 lesion volume in the absence of MRI-detectable acute inflammation. Brain, 2022, 145, 2008-2017.	7.6	5
418	<title>Toward frameless stereotaxy: anatomical-vascular correlation and registration</title>. , 1992, 1808, 214.		4
419	Analysis of projection geometry for few-view reconstruction of sparse objects. Medical Physics, 1993, 20, 1537-1547.	3.0	4
420	Atlas-based clustering of sulcal patterns — Application to the left inferior frontal sulcus. , 2012, , .		4
421	Improving Patient Specific Neurosurgical Models with Intraoperative Ultrasound and Augmented Reality Visualizations in a Neuronavigation Environment. Lecture Notes in Computer Science, 2016, , 28-35.	1.3	4
422	Recollection and familiarity in aging individuals: Gaining insight into relationships with medial temporal lobe structural integrity. Hippocampus, 2017, 27, 692-701.	1.9	4
423	Familiarity deficits in cognitively normal aging individuals with APOE Îµ4: A followâ€up investigation of medial temporal lobe structural correlates. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2017, 9, 21-24.	2.4	4
424	Physical activity and dentate gyrus volume in pediatric acquired demyelinating syndromes. Neurology: Neuroimmunology and NeuroInflammation, 2018, 5, e499.	6.0	4
425	An efficient and accurate method for robust interâ€dataset brain extraction and comparisons with 9 other methods. Human Brain Mapping, 2018, 39, 4241-4257.	3.6	4
426	Two novel PET image restoration methods guided by PETâ€MR kernels: Application to brain imaging. Medical Physics, 2019, 46, 2085-2102.	3.0	4
427	Open-source software for ultrasound-based guidance in spinal fusion surgery. Ultrasound in Medicine and Biology, 2020, 46, 3353-3368.	1.5	4
428	A Statistical Parts-Based Appearance Model of Inter-subject Variability. Lecture Notes in Computer Science, 2006, 9, 232-240.	1.3	4
429	Hierarchical Conditional Random Fields for Detection of Gad-Enhancing Lesions in Multiple Sclerosis. Lecture Notes in Computer Science, 2012, 15, 379-386.	1.3	4
430	Analysis of 3D Deformation Fields for Appearance-Based Segmentation. Lecture Notes in Computer Science, 2001, , 1189-1190.	1.3	4
431	Feature-Based Morphometry. Lecture Notes in Computer Science, 2009, 12, 109-116.	1.3	4
432	<title>Knowledge-based extraction of cerebral vasculature from anatomical MRI</title>. , 2001, 4322, 170.		3

#	Article	IF	Citations
433	Acoustic shadows detection, application to accurate reconstruction of 3D intraoperative ultrasound. , 2008, , .		3
434	Development of FMRI techniques for planning in functional neurosurgery for Parkinson’s disease. , 2008, , .		3
435	Multimodal neuroimaging markers of variation in cognitive ability in older HIV+ men. PLoS ONE, 2021, 16, e0243670.	2.5	3
436	Automatic Optimization of Depth Electrode Trajectory Planning. Lecture Notes in Computer Science, 2014, , 99-107.	1.3	3
437	An Object-Based Method for Rician Noise Estimation in MR Images. Lecture Notes in Computer Science, 2009, 12, 601-608.	1.3	3
438	Optimal Gaussian Mixture Models of Tissue Intensities in Brain MRI of Patients with Multiple-Sclerosis. Lecture Notes in Computer Science, 2010, , 165-173.	1.3	3
439	Stereotactic Neurosurgery Planning On A PC Based Workstation.. , 1989, , .		2
440	MRI inter-packet movement correction for images acquired with non-complementary data. , 2008, , .		2
441	Automatically learning cortical folding patterns. , 2009, , .		2
442	Multi-channel MRI segmentation with graph cuts using spectral gradient and multidimensional Gaussian mixture model. , 2009, , .		2
443	Robust 3D Reconstruction and Mean-Shift Clustering of Motoneurons from Serial Histological Images. Lecture Notes in Computer Science, 2010, , 191-199.	1.3	2
444	Spatial intensity prior correction for tissue segmentation in the developing human brain. , 2011, , 2049-2052.		2
445	IC-P-150: A UNIFIED ASSESSMENT OF FULLY AUTOMATED HIPPOCAMPUS SEGMENTATION METHODS. , 2014, 10, P86-P86.		2
446	Shape index distribution based local surface complexity applied to the human cortex. Proceedings of SPIE, 2015, 9413, .	0.8	2
447	Brain atrophy and patch-based grading in individuals from the CIMA-Q study: a progressive continuum from subjective cognitive decline to AD. Scientific Reports, 2019, 9, 13532.	3.3	2
448	Enhanced Recruitment During Executive Control Processing in Cognitively Preserved Patients With Pediatric-Onset MS. Journal of the International Neuropsychological Society, 2019, 25, 432-442.	1.8	2
449	Ageâ€specific associations between oestradiol, corticoâ€amygdalar structural covariance, and verbal and spatial skills. Journal of Neuroendocrinology, 2019, 31, e12698.	2.6	2
450	Quantitation of Tissue Resection Using a Brain Tumor Model and 7-T Magnetic Resonance Imaging Technology. World Neurosurgery, 2021, 148, e326-e339.	1.3	2

#	Article	IF	Citations
451	Realistic Simulated MRI and SPECT Databases. Lecture Notes in Computer Science, 2006, 9, 330-337.	1.3	2
452	Towards a Second Brain Images of Tumours for Evaluation (BITE2) Database. Lecture Notes in Computer Science, 2016, , 16-22.	1.3	2
453	Automatic Prediction of Cognitive and Functional Decline Can Significantly Decrease the Number of Subjects Required for Clinical Trials in Early Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2021, 84, 1-8.	2.6	2
454	A novel framework for the local extraction of extra-axial cerebrospinal fluid from MR brain images. , 2018, 10574, .		2
455	<title>Three-dimensional display of cortical anatomy and vasculature: MR angiography versus multimodality integration</title>. , 1990, , .		1
456	Visualizing the path of blood flow in static vessel images for image guided surgery of cerebral arteriovenous malformations. , 2012, , .		1
457	ICâ€Pâ€099: A quantitative comparison between two manual hippocampal segmentation protocols. Alzheimer's and Dementia, 2015, 11, P67.	0.8	1
458	MR-guided PET image denoising. , 2016, , .		1
459	IC-P-093: Deformation Based Morphometry Study of Retired CFL Football Players. , 2016, 12, P71-P72.		1
460	Fast Tractography Streamline Search. Lecture Notes in Computer Science, 2021, , 82-95.	1.3	1
461	The Essential Role of Open Data and Software for the Future of Ultrasound-Based Neuronavigation. Frontiers in Oncology, 2020, 10, 619274.	2.8	1
462	Is It Possible to Differentiate the Impact of Pediatric Monophasic Demyelinating Disorders and Multiple Sclerosis After a First Episode of Demyelination?. Lecture Notes in Computer Science, 2015, , 38-48.	1.3	1
463	Atlas-Guided Transcranial Doppler Ultrasound Examination with a Neuro-Surgical Navigation System: Case Study. Lecture Notes in Computer Science, 2016, , 19-27.	1.3	1
464	Volume Visualization for Neurovascular Augmented Reality Surgery. Lecture Notes in Computer Science, 2013, , 211-220.	1.3	1
465	Spatio-temporal Regularization for Longitudinal Registration to an Unbiased 3D Individual Template. Lecture Notes in Computer Science, 2012, , 1-12.	1.3	1
466	Automatic Markov Random Field Segmentation of Susceptibility-Weighted MR Venography. Lecture Notes in Computer Science, 2014, , 39-47.	1.3	1
467	SymBA: Diffeomorphic Registration Based on Gradient Orientation Alignment and Boundary Proximity of Sparsely Selected Voxels. Lecture Notes in Computer Science, 2014, , 21-30.	1.3	1
468	Sex-specific associations between maternal pregnancy-specific anxiety and newborn amygdalar volumes - preliminary findings from the FinnBrain Birth Cohort Study. Stress, 2022, 25, 213-226.	1.8	1

#	Article	IF	Citations
469	Ultrasound-based navigated pedicle screw insertion without intraoperative radiation: feasibility study on porcine cadavers. Spine Journal, 2022, 22, 1408-1417.	1.3	1
470	Fast Streamline Search: An Exact Technique for Diffusion MRI Tractography. Neuroinformatics, 2022, 20, 1093-1104.	2.8	1
471	Reconstruction of 3-D branching structures. , 1991, , 65-80.		0
472	Focal brain abnormalities in schizophrenia detected by linear regression analysis of magnetic resonance gray matter density maps. NeuroImage, 2001, 13, 1060.	4.2	0
473	Temporal Lobe Epilepsy Lateralization Based on MR Image Intensity and Registration Features. Lecture Notes in Computer Science, 2003, , 367-374.	1.3	0
474	The Creation of a Brain Atlas for Image Guided Neurosurgery Using Serial Histological Data. Lecture Notes in Computer Science, 2003, , 343-350.	1.3	0
475	P2-225 Using cortical thickness to predict Alzheimer's disease. Neurobiology of Aging, 2004, 25, S295.	3.1	0
476	A review of calibration techniques for freehand 3-D ultrasound systems. Ultrasound in Medicine and Biology, 2005, 31, 587.	1.5	0
477	Development and use of a kinetic FDG-PET dataset simulated from the MNI standard brain. , 2006, , .		0
478	MAPPING RELIABILITY OF MULTICENTER MRI: CORTICAL THICKNESS AND VOXEL-BASED MORPHOMETRY. Schizophrenia Research, 2010, 117, 461.	2.0	0
479	P1-280: Relative Risk Ratio for MRI Patch-Based Appearance Metric for Future Decline in Cognitively Healthy ADNI Participants. , 2016, 12, P525-P526.		0
480	P2â€277: DEFORMATIONâ€BASED MORPHOMETRY STUDY OF RETIRED CFL FOOTBALL PLAYERS. Alzheimer's and Dementia, 2016, 12, P735.	0.8	0
481	IC-P-151: Baseline Discrepancies in MRI Patch-Based Appearance Predictive of Future Decline in Cognitively Healthy ADNI Participants. , 2016, 12, P112-P112.		0
482	976. Estradiol, Cortico-Amygdalar Structural Networks and Cognitive Development. Biological Psychiatry, 2017, 81, S395.	1.3	0
483	ICâ€Pâ€166: BASELINE DIFFERENCES IN BRAIN MORPHOMETRY AND IMAGE GRADING OF INDIVIDUALS ON THE CONTINUUM FROM SUBJECTIVE COGNITIVE DECLINE TO AD: RESULTS FROM THE CIMAâ€Q STUDY. Alzheimer's and Dementia, 2018, 14, P139.	0.8	0
484	P3â€374: BASELINE DIFFERENCES IN BRAIN MORPHOMETRY AND IMAGE GRADING OF INDIVIDUALS ON THE CONTINUUM FROM SUBJECTIVE COGNITIVE DECLINE TO AD: RESULTS FROM THE CIMAâ€Q STUDY. Alzheimer's and Dementia, 2018, 14, P1234.	0.8	0
485	F67. Increased Amygdalar Activation to Angry Faces is Linked to Reduced Prefrontal Cortical Thickness and Hyperactive/Inattentive Symptomatology in Adolescents. Biological Psychiatry, 2018, 83, S263-S264.	1.3	0
486	Guest editorial for the IJCARS special issue on MICCAI 2017. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1309-1310.	2.8	0

#	Article	IF	Citations
487	Special Issue on MICCAI 2017. Medical Image Analysis, 2018, 48, 259.	11.6	0
488	Reply To: Cerebral Vasomotor Reactivity in Parkinson's Disease: A Missing Link between Dysautonomia, White Matter Lesions, and Cognitive Decline?. Movement Disorders Clinical Practice, 2020, 7, 996-998.	1.5	0
489	Temporal Lobe Epilepsy Surgical Outcome Prediction. Lecture Notes in Computer Science, 2004, , 696-702.	1.3	0
490	SU-FF-J-27: Novel 4D CT Scanning Protocol Using a Helical Single-Slice CT Scanner. Medical Physics, 2005, 32, 1925-1925.	3.0	0
491	SU-FF-J-130: Validation of Non-Linear Image Registration-Based Correction Method for Motion Artifacts in 4D-CT. Medical Physics, 2006, 33, 2050-2050.	3.0	0
492	TH-E-ValB-02: Image Registration-Based Tool for Correlation Studies of Radiation-Induced Fibrosis and Local Dose-Related Parameters in Conformal Non-Small Cell Lung Cancer Radiation Therapy. Medical Physics, 2006, 33, 2289-2289.	3.0	0
493	Exploring Cortical Folding Pattern Variability Using Local Image Features. Lecture Notes in Computer Science, 2011, , 43-53.	1.3	0
494	A New Framework for Analyzing Structural Volume Changes of Longitudinal Brain MRI Data. Lecture Notes in Computer Science, 2012, , 50-62.	1.3	0
495	Cortical Surface Analysis of Multi-contrast MR Data to Improve Detection of Cortical Pathology in Multiple Sclerosis. Lecture Notes in Computer Science, 2013, , 138-149.	1.3	0
496	Simulation of Ultrasound Images for Validation of MR to Ultrasound Registration in Neurosurgery. Lecture Notes in Computer Science, 2014, , 23-32.	1.3	0
497	Sci-Thur PM: Imaging - 02: Repeated landmark use for patient-to-image registration reduces fiducial registration error in patient-to-image mapping in image guided neurosurgery. Medical Physics, 2014, 41, 4-4.	3.0	0
498	Disrupted cognitive development following pediatric acquired demyelinating syndromes: a longitudinal study. Child Neuropsychology, 2021, , 1-22.	1.3	0
499	Despite heightened risk of cognitive decline, no evidence of local atrophy in people with subjective cognitive decline compared to normal controls in ADNI. Alzheimer's and Dementia, 2021, 17, .	0.8	0