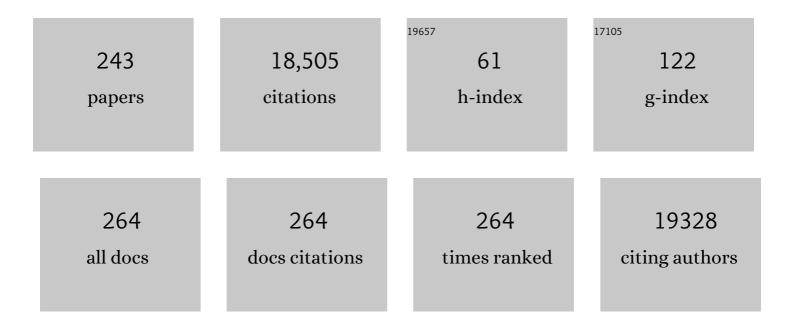
Alexander Leemans

List of Publications by Year in descending order

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Version: 2024-02-01



#	Article	IF	CITATIONS
1	Microstructural maturation of the human brain from childhood to adulthood. NeuroImage, 2008, 40, 1044-1055.	4.2	1,223
2	The <i>B</i> â€matrix must be rotated when correcting for subject motion in DTI data. Magnetic Resonance in Medicine, 2009, 61, 1336-1349.	3.0	1,204
3	The challenge of mapping the human connectome based on diffusion tractography. Nature Communications, 2017, 8, 1349.	12.8	956
4	Investigating the prevalence of complex fiber configurations in white matter tissue with diffusion magnetic resonance imaging. Human Brain Mapping, 2013, 34, 2747-2766.	3.6	887
5	Diffusion tensor imaging and beyond. Magnetic Resonance in Medicine, 2011, 65, 1532-1556.	3.0	771
6	Variability in the analysis of a single neuroimaging dataset by many teams. Nature, 2020, 582, 84-88.	27.8	634
7	Weighted linear least squares estimation of diffusion MRI parameters: Strengths, limitations, and pitfalls. NeuroImage, 2013, 81, 335-346.	4.2	407
8	Methodological considerations on tract-based spatial statistics (TBSS). NeuroImage, 2014, 100, 358-369.	4.2	395
9	Long-term neural and physiological phenotyping of a single human. Nature Communications, 2015, 6, 8885.	12.8	353
10	Diffusion MRI fiber tractography of the brain. NMR in Biomedicine, 2019, 32, e3785.	2.8	346
11	Probabilistic fiber tracking using the residual bootstrap with constrained spherical deconvolution. Human Brain Mapping, 2011, 32, 461-479.	3.6	335
12	Longitudinal Assessment of Chemotherapy-Induced Structural Changes in Cerebral White Matter and Its Correlation With Impaired Cognitive Functioning. Journal of Clinical Oncology, 2012, 30, 274-281.	1.6	334
13	Partial volume effect as a hidden covariate in DTI analyses. NeuroImage, 2011, 55, 1566-1576.	4.2	308
14	Gender differences and age-related white matter changes of the human brain: A diffusion tensor imaging study. Neurolmage, 2008, 39, 566-577.	4.2	274
15	Chemotherapyâ€induced structural changes in cerebral white matter and its correlation with impaired cognitive functioning in breast cancer patients. Human Brain Mapping, 2011, 32, 480-493.	3.6	228
16	Fronto-striatal circuitry and inhibitory control in autism: Findings from diffusion tensor imaging tractography. Cortex, 2012, 48, 183-193.	2.4	208
17	Microstructural White Matter Abnormalities and Cognitive Functioning in Type 2 Diabetes. Diabetes Care, 2013, 36, 137-144.	8.6	206
18	Diffusion Tensor Imaging. Methods in Molecular Biology, 2011, 711, 127-144.	0.9	197

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19	The influence of complex white matter architecture on the mean diffusivity in diffusion tensor MRI of the human brain. NeuroImage, 2012, 59, 2208-2216.	4.2	183
20	The importance of correcting for signal drift in diffusion MRI. Magnetic Resonance in Medicine, 2017, 77, 285-299.	3.0	174
21	Microstructural white matter abnormalities in type 2 diabetes mellitus: A diffusion tensor imaging study. NeuroImage, 2012, 59, 1098-1105.	4.2	170
22	Recursive calibration of the fiber response function for spherical deconvolution of diffusion MRI data. Neurolmage, 2014, 86, 67-80.	4.2	163
23	Structural network alterations and neurological dysfunction in cerebral amyloid angiopathy. Brain, 2015, 138, 179-188.	7.6	145
24	Altered structural networks and executive deficits in traumatic brain injury patients. Brain Structure and Function, 2014, 219, 193-209.	2.3	143
25	REKINDLE: Robust extraction of kurtosis INDices with linear estimation. Magnetic Resonance in Medicine, 2015, 73, 794-808.	3.0	139
26	Disruption of the Cerebral White Matter Network Is Related to Slowing of Information Processing Speed in Patients With Type 2 Diabetes. Diabetes, 2013, 62, 2112-2115.	0.6	135
27	Disruption of cerebral networks and cognitive impairment in Alzheimer disease. Neurology, 2013, 80, 1370-1377.	1.1	125
28	Quantitative diffusion tensor imaging in amyotrophic lateral sclerosis: Revisited. Human Brain Mapping, 2009, 30, 3657-3675.	3.6	122
29	Frontal networks in adults with autism spectrum disorder. Brain, 2016, 139, 616-630.	7.6	118
30	PCA-based groupwise image registration for quantitative MRI. Medical Image Analysis, 2016, 29, 65-78.	11.6	118
31	Effects of early nutrition and growth on brain volumes, white matter microstructure, and neurodevelopmental outcome in preterm newborns. Pediatric Research, 2018, 83, 102-110.	2.3	118
32	Graph analysis of functional brain networks for cognitive control of action in traumatic brain injury. Brain, 2012, 135, 1293-1307.	7.6	117
33	Limbic and Callosal White Matter Changes in Euthymic Bipolar I Disorder: An Advanced Diffusion Magnetic Resonance Imaging Tractography Study. Biological Psychiatry, 2013, 73, 194-201.	1.3	116
34	Signal to noise ratio and uncertainty in diffusion tensor imaging at 1.5, 3.0, and 7.0 Tesla. Journal of Magnetic Resonance Imaging, 2011, 33, 1456-1463.	3.4	114
35	Nonrigid Coregistration of Diffusion Tensor Images Using a Viscous Fluid Model and Mutual Information. IEEE Transactions on Medical Imaging, 2007, 26, 1598-1612.	8.9	105
36	Can diffusion kurtosis imaging improve the sensitivity and specificity of detecting microstructural alterations in brain tissue chronically after experimental stroke? Comparisons with diffusion tensor imaging and histology. NeuroImage, 2014, 97, 363-373.	4.2	101

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37	The effect of Gibbs ringing artifacts on measures derived from diffusion MRI. Neurolmage, 2015, 120, 441-455.	4.2	94
38	Tractography dissection variability: What happens when 42 groups dissect 14 white matter bundles on the same dataset?. NeuroImage, 2021, 243, 118502.	4.2	94
39	Microstructural white matter changes in normal aging: A diffusion tensor imaging study with higher-order polynomial regression models. NeuroImage, 2010, 49, 32-43.	4.2	93
40	Diffusion tensor MRI of chemotherapy-induced cognitive impairment in non-CNS cancer patients: a review. Brain Imaging and Behavior, 2013, 7, 409-435.	2.1	93
41	Characterizing the microstructural basis of "unidentified bright objects―in neurofibromatosis type 1: A combined in vivo multicomponent T2 relaxation and multi-shell diffusion MRI analysis. NeuroImage: Clinical, 2014, 4, 649-658.	2.7	92
42	Cross-scanner and cross-protocol diffusion MRI data harmonisation: A benchmark database and evaluation of algorithms. NeuroImage, 2019, 195, 285-299.	4.2	92
43	Comparing isotropic and anisotropic smoothing for voxelâ€based DTI analyses: A simulation study. Human Brain Mapping, 2010, 31, 98-114.	3.6	89
44	Comprehensive framework for accurate diffusion MRI parameter estimation. Magnetic Resonance in Medicine, 2013, 70, 972-984.	3.0	89
45	Multiple Microbleeds are Related to Cerebral Network Disruptions in Patients with Early Alzheimer's Disease, Journal of Alzheimer's Disease, 2013, 38, 211-221.	2.6	89
46	Temporal association tracts and the breakdown of episodic memory in mild cognitive impairment. Neurology, 2012, 79, 2233-2240.	1.1	88
47	Brainâ€behavior relationships in young traumatic brain injury patients: DTI metrics are highly correlated with postural control. Human Brain Mapping, 2010, 31, 992-1002.	3.6	87
48	Brain connectivity and postural control in young traumatic brain injury patients: A diffusion MRI based network analysis. NeuroImage: Clinical, 2012, 1, 106-115.	2.7	84
49	Reduced fractional anisotropy in the uncinate fasciculus in patients with major depression carrying the metâ€allele of the Val66Met brainâ€derived neurotrophic factor genotype. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 2012, 159B, 537-548.	1.7	82
50	Construction of a stereotaxic DTI atlas with full diffusion tensor information for studying white matter maturation from childhood to adolescence using tractographyâ€based segmentations. Human Brain Mapping, 2010, 31, 470-486.	3.6	81
51	Improved Sensitivity to Cerebral White Matter Abnormalities in Alzheimer's Disease with Spherical Deconvolution Based Tractography. PLoS ONE, 2012, 7, e44074.	2.5	77
52	The Effect of Lacunar Infarcts on White Matter Tract Integrity. Stroke, 2013, 44, 2019-2021.	2.0	77
53	Topological correlations of structural and functional networks in patients with traumatic brain injury. Frontiers in Human Neuroscience, 2013, 7, 726.	2.0	77
54	Hemispheric lateralization of topological organization in structural brain networks. Human Brain Mapping, 2014, 35, 4944-4957.	3.6	77

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55	On the construction of an inter-subject diffusion tensor magnetic resonance atlas of the healthy human brain. NeuroImage, 2008, 43, 69-80.	4.2	76
56	Brain-behavior relationships in young traumatic brain injury patients: Fractional anisotropy measures are highly correlated with dynamic visuomotor tracking performance. Neuropsychologia, 2010, 48, 1472-1482.	1.6	72
57	A trackingâ€based diffusion tensor imaging segmentation method for the detection of diffusionâ€related changes of the cervical spinal cord with aging. Journal of Magnetic Resonance Imaging, 2008, 27, 978-991.	3.4	70
58	Correlation of cognitive dysfunction and diffusion tensor MRI measures in patients with mild and moderate multiple sclerosis. Journal of Magnetic Resonance Imaging, 2010, 31, 1492-1498.	3.4	70
59	ls There a Common Neuroanatomical Substrate of Language Deficit between Autism Spectrum Disorder and Specific Language Impairment?. Cerebral Cortex, 2012, 22, 2263-2271.	2.9	69
60	Altered Interhemispheric and Temporal Lobe White Matter Microstructural Organization in Severe Chronic Schizophrenia. Neuropsychopharmacology, 2014, 39, 944-954.	5.4	68
61	Moderate and late preterm infants exhibit widespread brain white matter microstructure alterations at term-equivalent age relative to term-born controls. Brain Imaging and Behavior, 2016, 10, 41-49.	2.1	66
62	Changes in Brain Structural Networks and Cognitive Functions in Testicular Cancer Patients Receiving Cisplatin-Based Chemotherapy. Journal of the National Cancer Institute, 2017, 109, .	6.3	66
63	Diffusion tensor imaging in a rat model of Parkinson's disease after lesioning of the nigrostriatal tract. NMR in Biomedicine, 2009, 22, 697-706.	2.8	65
64	Microstructural brain development between 30 and 40 weeks corrected age in a longitudinal cohort of extremely preterm infants. NeuroImage, 2014, 103, 214-224.	4.2	65
65	"MASSIVE―brain dataset: Multiple acquisitions for standardization of structural imaging validation and evaluation. Magnetic Resonance in Medicine, 2017, 77, 1797-1809.	3.0	65
66	Diffusion Tensor Imaging Biomarkers to Predict Motor Outcomes in Stroke: A Narrative Review. Frontiers in Neurology, 2019, 10, 445.	2.4	65
67	Integrating diffusion kurtosis imaging, dynamic susceptibility-weighted contrast-enhanced MRI, and short echo time chemical shift imaging for grading gliomas. Neuro-Oncology, 2014, 16, 1010-1021.	1.2	64
68	Bimanual motor deficits in older adults predicted by diffusion tensor imaging metrics of corpus callosum subregions. Brain Structure and Function, 2015, 220, 273-290.	2.3	64
69	Variability in diffusion kurtosis imaging: Impact on study design, statistical power and interpretation. Neurolmage, 2013, 76, 145-154.	4.2	62
70	Diffusion MRI-based cortical connectome reconstruction: dependency on tractography procedures and neuroanatomical characteristics. Brain Structure and Function, 2018, 223, 2269-2285.	2.3	60
71	Architectural configuration and microstructural properties of the sacral plexus: A diffusion tensor MRI and fiber tractography study. NeuroImage, 2012, 62, 1792-1799.	4.2	59
72	Bimanual Coordination and Corpus Callosum Microstructure in Young Adults with Traumatic Brain Injury: A Diffusion Tensor Imaging Study. Journal of Neurotrauma, 2011, 28, 897-913.	3.4	58

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73	A diffusion tensor imaging group study of the spinal cord in multiple sclerosis patients with and without T ₂ spinal cord lesions. Journal of Magnetic Resonance Imaging, 2009, 30, 25-34.	3.4	57
74	The effect of template selection on diffusion tensor voxel-based analysis results. NeuroImage, 2011, 55, 566-573.	4.2	57
75	Diffusion tensor imaging metrics of the corpus callosum in relation to bimanual coordination: Effect of task complexity and sensory feedback. Human Brain Mapping, 2013, 34, 241-252.	3.6	57
76	Decoupling of structural and functional brain connectivity in older adults with white matter hyperintensities. NeuroImage, 2015, 117, 222-229.	4.2	57
77	Reproducibility and intercorrelation of graph theoretical measures in structural brain connectivity networks. Medical Image Analysis, 2019, 52, 56-67.	11.6	57
78	Correlations Between White Matter Integrity and Motor Function in Traumatic Brain Injury Patients. Neurorehabilitation and Neural Repair, 2011, 25, 492-502.	2.9	55
79	Does Diffusion Tensor Imaging-Based Tractography at 3 Months of Age Contribute to the Prediction of Motor Outcome After Perinatal Arterial Ischemic Stroke?. Stroke, 2011, 42, 3410-3414.	2.0	54
80	Does the use of hormonal contraceptives cause microstructural changes in cerebral white matter? Preliminary results of a DTI and tractography study. European Radiology, 2013, 23, 57-64.	4.5	54
81	White Matter Differences Among Adolescents Reporting Psychotic Experiences. JAMA Psychiatry, 2015, 72, 668.	11.0	54
82	White matter abnormalities and impaired attention abilities in children born very preterm. Neurolmage, 2016, 124, 75-84.	4.2	54
83	Transcallosal connectivity of the human cortical motor network. Brain Structure and Function, 2017, 222, 1243-1252.	2.3	53
84	On the construction of a ground truth framework for evaluating voxel-based diffusion tensor MRI analysis methods. NeuroImage, 2009, 46, 692-707.	4.2	52
85	Recovery from chemotherapy-induced white matter changes in young breast cancer survivors?. Brain Imaging and Behavior, 2018, 12, 64-77.	2.1	52
86	Microstructural organization of corpus callosum projections to prefrontal cortex predicts bimanual motor learning. Learning and Memory, 2012, 19, 351-357.	1.3	51
87	Isotropic non-white matter partial volume effects in constrained spherical deconvolution. Frontiers in Neuroinformatics, 2014, 8, 28.	2.5	51
88	Cerebral Microvascular Lesions on High-Resolution 7-Tesla MRI in Patients With Type 2 Diabetes. Diabetes, 2014, 63, 3523-3529.	0.6	51
89	A comparison of MR based segmentation methods for measuring brain atrophy progression. NeuroImage, 2011, 54, 760-768.	4.2	50
90	White matter differences in euthymic bipolar I disorder: a combined magnetic resonance imaging and diffusion tensor imaging voxelâ€based study. Bipolar Disorders, 2013, 15, 365-376.	1.9	50

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91	Training-induced improvements in postural control are accompanied by alterations in cerebellar white matter in brain injured patients. NeuroImage: Clinical, 2015, 7, 240-251.	2.7	50
92	Axon density and axon orientation dispersion in children born preterm. Human Brain Mapping, 2016, 37, 3080-3102.	3.6	50
93	Anatomical integration and rich-club connectivity in euthymic bipolar disorder. Psychological Medicine, 2017, 47, 1609-1623.	4.5	49
94	Structural Changes between Seasons in the Songbird Auditory Forebrain. Journal of Neuroscience, 2009, 29, 13557-13565.	3.6	48
95	Structural brain network analysis in families multiply affected with bipolar I disorder. Psychiatry Research - Neuroimaging, 2015, 234, 44-51.	1.8	48
96	Intravoxel incoherent motion modeling in the kidneys: Comparison of mono-, bi-, and triexponential fit. Journal of Magnetic Resonance Imaging, 2017, 46, 228-239.	3.4	48
97	Brain Connectomics of Visual-Motor Deficits in Children with Developmental Coordination Disorder. Journal of Pediatrics, 2016, 169, 21-27.e2.	1.8	46
98	Cortical Network for Gaze Control in Humans Revealed Using Multimodal MRI. Cerebral Cortex, 2012, 22, 765-775.	2.9	44
99	Differential corticospinal tract degeneration in homozygous 'D90A' SOD-1 ALS and sporadic ALS. Journal of Neurology, Neurosurgery and Psychiatry, 2011, 82, 843-849.	1.9	43
100	Bimanual Motor Coordination in Older Adults Is Associated with Increased Functional Brain Connectivity – A Graph-Theoretical Analysis. PLoS ONE, 2013, 8, e62133.	2.5	43
101	Distribution of tract deficits in schizophrenia. BMC Psychiatry, 2014, 14, 99.	2.6	43
102	White matter microstructural abnormalities in families multiply affected with bipolar I disorder: a diffusion tensor tractography study. Psychological Medicine, 2014, 44, 2139-2150.	4.5	42
103	Diffusion Tensor Imaging of Vascular Parkinsonism. Archives of Neurology, 2012, 69, 1340.	4.5	41
104	A DTI-based model for TMS using the independent impedance method with frequency-dependent tissue parameters. Physics in Medicine and Biology, 2012, 57, 2169-2188.	3.0	41
105	Fast and accurate Slicewise OutLler Detection (SOLID) with informed model estimation for diffusion MRI data. NeuroImage, 2018, 181, 331-346.	4.2	41
106	In vivo diffusion tensor imaging (DTI) of brain subdivisions and vocal pathways in songbirds. NeuroImage, 2006, 29, 754-763.	4.2	39
107	Neonatal DTI early after birth predicts motor outcome in preterm infants with periventricular hemorrhagic infarction. Pediatric Research, 2015, 78, 298-303.	2.3	39
108	Small vessel disease and cognitive impairment: The relevance of central network connections. Human Brain Mapping, 2016, 37, 2446-2454.	3.6	39

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109	The Default Mode Network as a Biomarker of Persistent Complaints after Mild Traumatic Brain Injury: A Longitudinal Functional Magnetic Resonance Imaging Study. Journal of Neurotrauma, 2017, 34, 3262-3269.	3.4	39
110	White matter hyperintensity shape and location feature analysis on brain MRI; proof of principle study in patients with diabetes. Scientific Reports, 2018, 8, 1893.	3.3	39
111	Abnormal frontoâ€parietal white matter organisation in the superior longitudinal fasciculus branches in autism spectrum disorders. European Journal of Neuroscience, 2018, 47, 652-661.	2.6	39
112	Affine Coregistration of Diffusion Tensor Magnetic Resonance Images Using Mutual Information. Lecture Notes in Computer Science, 2005, , 523-530.	1.3	39
113	Reliability of two clinically relevant fiber pathways reconstructed with constrained spherical deconvolution. Magnetic Resonance in Medicine, 2013, 70, 1544-1556.	3.0	38
114	Abnormal wiring of the connectome in adults with high-functioning autism spectrum disorder. Molecular Autism, 2015, 6, 65.	4.9	38
115	Structural and Functional Cortical Connectivity Mediating Cross Education of Motor Function. Journal of Neuroscience, 2017, 37, 2555-2564.	3.6	38
116	Tractography reproducibility challenge with empirical data (TraCED): The 2017 ISMRM diffusion study group challenge. Journal of Magnetic Resonance Imaging, 2020, 51, 234-249.	3.4	38
117	Hippocampal Disconnection in Early Alzheimer's Disease: A 7 Tesla MRI Study. Journal of Alzheimer's Disease, 2015, 45, 1247-1256.	2.6	37
118	MRI shows thickening and altered diffusion in the median and ulnar nerves in multifocal motor neuropathy. European Radiology, 2017, 27, 2216-2224.	4.5	37
119	Multiparametric quantitative MRI assessment of thigh muscles in limbâ€girdle muscular dystrophy 2A and 2B. Muscle and Nerve, 2018, 58, 550-558.	2.2	37
120	White Matter and Visuospatial Processing in Autism: A Constrained Spherical Deconvolution Tractography Study. Autism Research, 2013, 6, 307-319.	3.8	36
121	Structural neuroimaging correlates of allelic variation of the BDNF val66met polymorphism. NeuroImage, 2014, 90, 280-289.	4.2	36
122	Informed constrained spherical deconvolution (iCSD). Medical Image Analysis, 2015, 24, 269-281.	11.6	36
123	White matter maturation in the neonatal brain is predictive of school age cognitive capacities in children born very preterm. Developmental Medicine and Child Neurology, 2017, 59, 939-946.	2.1	36
124	Alterations in the optic radiations of very preterm children—Perinatal predictors and relationships with visual outcomes. NeuroImage: Clinical, 2014, 4, 145-153.	2.7	35
125	Effective electric fields along realistic DTI-based neural trajectories for modelling the stimulation mechanisms of TMS. Physics in Medicine and Biology, 2015, 60, 453-471.	3.0	35
126	Evidence for Training-Dependent Structural Neuroplasticity in Brain-Injured Patients: A Critical Review. Neurorehabilitation and Neural Repair, 2018, 32, 99-114.	2.9	35

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127	Associations between prenatal, childhood, and adolescent stress and variations in white-matter properties in young men. NeuroImage, 2018, 182, 389-397.	4.2	33
128	Evaluation of the 3D fractal dimension as a marker of structural brain complexity in multipleâ€acquisition MRI. Human Brain Mapping, 2019, 40, 3299-3320.	3.6	33
129	White Matter Structure in Youth With Behavioral and Emotional Dysregulation Disorders. JAMA Psychiatry, 2015, 72, 367.	11.0	32
130	Histopathology of diffusion imaging abnormalities in cerebral amyloid angiopathy. Neurology, 2019, 92, e933-e943.	1.1	32
131	The adverse effect of gradient nonlinearities on diffusion MRI: From voxels to group studies. NeuroImage, 2020, 205, 116127.	4.2	32
132	Constrained spherical deconvolution-based tractography and tract-based spatial statistics show abnormal microstructural organization in Asperger syndrome. Molecular Autism, 2015, 6, 4.	4.9	31
133	Altered Wiring of the Human Structural Connectome in Adults with Mild Traumatic Brain Injury. Journal of Neurotrauma, 2017, 34, 1035-1044.	3.4	30
134	The cumulative effect of small vessel disease lesions is reflected in structural brain networks of memory clinic patients. NeuroImage: Clinical, 2018, 19, 963-969.	2.7	30
135	Assessment of Global and Regional Diffusion Changes along White Matter Tracts in Parkinsonian Disorders by MR Tractography. PLoS ONE, 2013, 8, e66022.	2.5	29
136	Automated correction of improperly rotated diffusion gradient orientations in diffusion weighted MRI. Medical Image Analysis, 2014, 18, 953-962.	11.6	29
137	Hierarchical non-negative matrix factorization to characterize brain tumor heterogeneity using multi-parametric MRI. NMR in Biomedicine, 2015, 28, 1599-1624.	2.8	29
138	Microstructural brain abnormalities in Huntington's disease: A twoâ€year followâ€up. Human Brain Mapping, 2015, 36, 2061-2074.	3.6	29
139	Accelerated corpus callosum development in prematurity predicts improved outcome. Human Brain Mapping, 2015, 36, 3733-3748.	3.6	27
140	Trade-off between angular and spatial resolutions in in vivo fiber tractography. NeuroImage, 2016, 129, 117-132.	4.2	27
141	Changes in cortical thickness and volume after cranial radiation treatment: A systematic review. Radiotherapy and Oncology, 2019, 135, 33-42.	0.6	27
142	Acquisition Guidelines and Quality Assessment Tools for Analyzing Neonatal Diffusion Tensor MRI Data. American Journal of Neuroradiology, 2013, 34, 1496-1505.	2.4	26
143	Abnormal functional connectivity during visuospatial processing is associated with disrupted organisation of white matter in autism. Frontiers in Human Neuroscience, 2013, 7, 434.	2.0	26
144	Layered genetic control of DNA methylation and gene expression: a locus of multiple sclerosis in healthy individuals. Human Molecular Genetics, 2015, 24, 5733-5745.	2.9	26

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145	Microstructural White Matter Abnormalities and Cognitive Impairment After Aneurysmal Subarachnoid Hemorrhage. Stroke, 2018, 49, 2040-2045.	2.0	26
146	Reliability of the corticospinal tract and arcuate fasciculus reconstructed with DTI-based tractography: implications for clinical practice. European Radiology, 2013, 23, 28-36.	4.5	24
147	Multi-Fiber Tractography Visualizations for Diffusion MRI Data. PLoS ONE, 2013, 8, e81453.	2.5	24
148	Diffusion tensor imaging of the auditory nerve in patients with long-term single-sided deafness. Hearing Research, 2015, 323, 1-8.	2.0	24
149	Dose-dependent volume loss in subcortical deep grey matter structures after cranial radiotherapy. Clinical and Translational Radiation Oncology, 2021, 26, 35-41.	1.7	24
150	Dynamics of the connectome in Huntington's disease: A longitudinal diffusion MRI study. NeuroImage: Clinical, 2015, 9, 32-43.	2.7	23
151	A robust deconvolution method to disentangle multiple water pools in diffusion MRI. NMR in Biomedicine, 2018, 31, e3965.	2.8	23
152	The YOUth cohort study: MRI protocol and test-retest reliability in adults. Developmental Cognitive Neuroscience, 2020, 45, 100816.	4.0	23
153	Quantitative DTI Measures. , 2016, , 65-87.		22
154	The Superoanterior Fasciculus (SAF): A Novel White Matter Pathway in the Human Brain?. Frontiers in Neuroanatomy, 2019, 13, 24.	1.7	22
155	Comparative Fitness of a Parent Leishmania donovani Clinical Isolate and Its Experimentally Derived Paromomycin-Resistant Strain. PLoS ONE, 2015, 10, e0140139.	2.5	21
156	Evaluating Contextual Processing in Diffusion MRI: Application to Optic Radiation Reconstruction for Epilepsy Surgery. PLoS ONE, 2014, 9, e101524.	2.5	21
157	Uncertainty estimations for quantitative in vivo MRI T1 mapping. Journal of Magnetic Resonance, 2012, 224, 53-60.	2.1	20
158	White matter network alterations in patients with depersonalization/derealization disorder. Journal of Psychiatry and Neuroscience, 2018, 43, 347-357.	2.4	20
159	Accelerated intermittent theta burst stimulation in major depression induces decreases in modularity: A connectome analysis. Network Neuroscience, 2019, 3, 157-172.	2.6	20
160	Automated characterization of noise distributions in diffusion MRI data. Medical Image Analysis, 2020, 65, 101758.	11.6	20
161	Cerebral white matter and neurodevelopment of preterm infants after coagulase-negative staphylococcal sepsis. Pediatric Critical Care Medicine, 2012, 13, 678-684.	0.5	18
162	Increased Coherence of White Matter Fiber Tract Organization in Adults with A sperger Syndrome: A Diffusion Tensor Imaging Study. Autism Research, 2013, 6, 642-650.	3.8	18

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163	Diffusion Tensor Imaging and Fiber Tractography in Children with Craniosynostosis Syndromes. American Journal of Neuroradiology, 2015, 36, 1558-1564.	2.4	18
164	DTI Analysis Methods: Region of Interest Analysis. , 2016, , 175-182.		18
165	Changes in brain morphology and microstructure in relation to early brain activity in extremely preterm infants. Pediatric Research, 2018, 83, 834-842.	2.3	18
166	White matter organization in relation to upper limb motor control in healthy subjects: exploring the added value of diffusion kurtosis imaging. Brain Structure and Function, 2014, 219, 1627-1638.	2.3	17
167	Diffusion Tensor Magnetic Resonance Imaging and Fiber Tractography of the Sacral Plexus in Children with Spina Bifida. Journal of Urology, 2014, 192, 927-933.	0.4	17
168	Sheet Probability Index (SPI): Characterizing the geometrical organization of the white matter with diffusion MRI. NeuroImage, 2016, 142, 260-279.	4.2	17
169	Microstructure of Strategic White Matter Tracts and Cognition in Memory Clinic Patients with Vascular Brain Injury. Dementia and Geriatric Cognitive Disorders, 2017, 44, 268-282.	1.5	17
170	Effect of radiation therapy on cerebral cortical thickness in glioma patients: Treatment-induced thinning of the healthy cortex. Neuro-Oncology Advances, 2020, 2, vdaa060.	0.7	17
171	Insights from the IronTract challenge: Optimal methods for mapping brain pathways from multi-shell diffusion MRI. NeuroImage, 2022, 257, 119327.	4.2	17
172	Weight loss, behavioral change, and structural neuroplasticity in children with obesity through a multidisciplinary treatment program. Human Brain Mapping, 2019, 40, 137-150.	3.6	16
173	Spherical deconvolution with tissue-specific response functions and multi-shell diffusion MRI to estimate multiple fiber orientation distributions (mFODs). NeuroImage, 2020, 222, 117206.	4.2	16
174	Generalized Richardson-Lucy (GRL) for analyzing multi-shell diffusion MRI data. NeuroImage, 2020, 218, 116948.	4.2	16
175	Choosing the polarity of the phase-encoding direction in diffusion MRI: Does it matter for group analysis?. NeuroImage: Clinical, 2016, 11, 539-547.	2.7	15
176	Quantifying the brain's sheet structure with normalized convolution. Medical Image Analysis, 2017, 39, 162-177.	11.6	15
177	Diffusion imaging markers of bipolar versus general psychopathology risk in youth at-risk. Neuropsychopharmacology, 2018, 43, 2212-2220.	5.4	15
178	Indirect frontocingulate structural connectivity predicts clinical response to accelerated rTMS in major depressive disorder. Journal of Psychiatry and Neuroscience, 2020, 45, 243-252.	2.4	15
179	Perinatal thalamic injury: MRI predictors of electrical status epilepticus in sleep and long-term neurodevelopment. NeuroImage: Clinical, 2020, 26, 102227.	2.7	15
180	Seeing More by Showing Less: Orientation-Dependent Transparency Rendering for Fiber Tractography Visualization. PLoS ONE, 2015, 10, e0139434.	2.5	14

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181	Diffusion tensor imaging of peripheral nerves in non-fixed post-mortem subjects. Forensic Science International, 2016, 263, 139-146.	2.2	14
182	Harmonization of diffusion <scp>MRI</scp> data sets with adaptive dictionary learning. Human Brain Mapping, 2020, 41, 4478-4499.	3.6	14
183	Reduced hippocampal volume in adolescents with psychotic experiences: A longitudinal population-based study. PLoS ONE, 2020, 15, e0233670.	2.5	14
184	Automated longitudinal intra-subject analysis (ALISA) for diffusion MRI tractography. NeuroImage, 2014, 86, 404-416.	4.2	13
185	Multicenter reproducibility study of diffusion MRI and fiber tractography of the lumbosacral nerves. Journal of Magnetic Resonance Imaging, 2018, 48, 951-963.	3.4	13
186	Widespread white matter connectivity abnormalities in narcolepsy type 1: A diffusion tensor imaging study. NeuroImage: Clinical, 2019, 24, 101963.	2.7	13
187	The effect of gradient nonlinearities on fiber orientation estimates from spherical deconvolution of diffusion magnetic resonance imaging data. Human Brain Mapping, 2021, 42, 367-383.	3.6	13
188	Alterations in brain white matter contributing to ageâ€related slowing of task switching performance: The role of radial diffusivity and magnetization transfer ratio. Human Brain Mapping, 2016, 37, 4084-4098.	3.6	12
189	DTI Analysis Methods: Voxel-Based Analysis. , 2016, , 183-203.		11
190	D-BRAIN: Anatomically Accurate Simulated Diffusion MRI Brain Data. PLoS ONE, 2016, 11, e0149778.	2.5	11
191	Choice of Diffusion Tensor Estimation Approach Affects Fiber Tractography of the Fornix in Preterm Brain. American Journal of Neuroradiology, 2014, 35, 1219-1225.	2.4	10
192	A Different Brain: Anomalies of Functional and Structural Connections in Williams Syndrome. Frontiers in Neurology, 2018, 9, 721.	2.4	10
193	On the sensitivity of the diffusion MRI signal to brain activity in response to a motor cortex paradigm. Human Brain Mapping, 2019, 40, 5069-5082.	3.6	10
194	Reducing variability in along-tract analysis with diffusion profile realignment. NeuroImage, 2019, 199, 663-679.	4.2	10
195	Psychotic experiences in childhood are associated with increased structural integrity of the left arcuate fasciculus – A population-based case-control study. Schizophrenia Research, 2020, 215, 378-384.	2.0	10
196	Regions of white matter abnormalities in the arcuate fasciculus in veterans with anger and aggression problems. Brain Structure and Function, 2020, 225, 1401-1411.	2.3	10
197	Early prediction of unilateral cerebral palsy in infants at risk: MRI versus the hand assessment for infants. Pediatric Research, 2020, 87, 932-939.	2.3	10
198	On the generalizability of diffusion MRI signal representations across acquisition parameters, sequences and tissue types: Chronicles of the MEMENTO challenge. NeuroImage, 2021, 240, 118367.	4.2	10

#	Article	IF	CITATIONS
199	Recent advancements in diffusion MRI for investigating cortical development after preterm birthââ,¬â€potential and pitfalls. Frontiers in Human Neuroscience, 2014, 8, 1066.	2.0	9
200	Learning Morse Code Alters Microstructural Properties in the Inferior Longitudinal Fasciculus: A DTI Study. Frontiers in Human Neuroscience, 2017, 11, 383.	2.0	9
201	Progressive microstructural changes of the occipital cortex in Huntington's disease. Brain Imaging and Behavior, 2018, 12, 1786-1794.	2.1	9
202	Data quality in diffusion tensor imaging studies of the preterm brain: a systematic review. Pediatric Radiology, 2015, 45, 1372-1381.	2.0	8
203	Multimodal MRI reveals structural connectivity differences in 22q11 deletion syndrome related to impaired spatial working memory. Human Brain Mapping, 2016, 37, 4689-4705.	3.6	8
204	Cross-site harmonization of multi-shell diffusion MRI measures based on rotational invariant spherical harmonics (RISH). NeuroImage, 2022, 259, 119439.	4.2	8
205	Mild cerebellar injury does not significantly affect cerebral white matter microstructural organization and neurodevelopmental outcome in a contemporary cohort of preterm infants. Pediatric Research, 2018, 83, 1004-1010.	2.3	7
206	Magnetic resonance imaging of the cervical spinal cord in spinal muscular atrophy. NeuroImage: Clinical, 2019, 24, 102002.	2.7	7
207	Structural Network Analysis Using Diffusion MRI Tractography in Parkinson's Disease and Correlations With Motor Impairment. Frontiers in Neurology, 2020, 11, 841.	2.4	7
208	White matter microstructure of the neural emotion regulation circuitry in mild traumatic brain injury. European Journal of Neuroscience, 2021, 53, 3463-3475.	2.6	7
209	Investigating the need of triggering the acquisition for infant diffusion MRI: A quantitative study including bootstrap statistics. NeuroImage, 2013, 69, 198-205.	4.2	6
210	Diffusion MRI of the brain: The naked truth. NMR in Biomedicine, 2019, 32, e4084.	2.8	6
211	Effect of Fixed-Density Thresholding on Structural Brain Networks: A Demonstration in Cerebral Small Vessel Disease. Brain Connectivity, 2020, 10, 121-133.	1.7	6
212	Iranian Brain Imaging Database: A Neuropsychiatric Database of Healthy Brain. Basic and Clinical Neuroscience, 2021, 12, 115-132.	0.6	6
213	REPIMPACT - a prospective longitudinal multisite study on the effects of repetitive head impacts in youth soccer. Brain Imaging and Behavior, 2022, 16, 492-502.	2.1	6
214	Diffusion kurtosis imaging of white matter in bipolar disorder. Psychiatry Research - Neuroimaging, 2021, 317, 111341.	1.8	6
215	Tracking the Corticospinal Tract in Patients With High-Grade Glioma: Clinical Evaluation of Multi-Level Fiber Tracking and Comparison to Conventional Deterministic Approaches. Frontiers in Oncology, 2021, 11, 761169.	2.8	6
216	Estimation of uncertainty in constrained spherical deconvolution fiber orientations. , 2008, , .		5

 $\label{eq:Estimation} Estimation of uncertainty in constrained spherical deconvolution fiber orientations.\,, 2008,, .$ 216

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#	Article	IF	CITATIONS
217	Post-mortem diffusion MRI of the cervical spine and its nerve roots. Journal of Forensic Radiology and Imaging, 2018, 12, 50-56.	1.2	5
218	Microstructural White Matter Tissue Characteristics Are Modulated by Homocysteine: A Diffusion Tensor Imaging Study. PLoS ONE, 2015, 10, e0116330.	2.5	5
219	The Added Value of Diffusion Tensor Imaging for Automated White Matter Hyperintensity Segmentation. Mathematics and Visualization, 2014, , 45-53.	0.6	5
220	Assessment of methods to extract the mid-sagittal plane from brain MR images. Proceedings of SPIE, 2013, , .	0.8	4
221	Checking and Correcting DTI Data. , 2016, , 127-150.		4
222	The arcuate fasciculus network and verbal deficits in psychosis. Translational Neuroscience, 2017, 8, 117-126.	1.4	4
223	Fiber orientation distribution from diffusion MRI: Effects of inaccurate response function calibration. Journal of Neuroimaging, 2021, 31, 1082-1098.	2.0	4
224	Non-rigid Groupwise Image Registration for Motion Compensation in Quantitative MRI. Lecture Notes in Computer Science, 2014, , 184-193.	1.3	4
225	Diffusion MRI harmonization enables joint-analysis of multicentre data of patients with cerebral small vessel disease. NeuroImage: Clinical, 2021, 32, 102886.	2.7	4
226	Iterative Co-linearity Filtering and Parameterization of Fiber Tracts in the Entire Cingulum. Lecture Notes in Computer Science, 2009, 12, 853-860.	1.3	3
227	Assessment of quantitative cortical biomarkers in the developing brain of preterm infants. Proceedings of SPIE, 2013, , .	0.8	2
228	Automatic, Fast and Robust Characterization of Noise Distributions for Diffusion MRI. Lecture Notes in Computer Science, 2018, , 304-312.	1.3	2
229	Association between Motor Planning and the Frontoparietal Network in Children: An Exploratory Multimodal Study. Journal of the International Neuropsychological Society, 2022, 28, 926-936.	1.8	2
230	Groupwise Registration for Correcting Subject Motion and Eddy Current Distortions in Diffusion MRI Using a PCA Based Dissimilarity Metric. Mathematics and Visualization, 2014, , 163-174.	0.6	2
231	Association of Superficial White Matter Alterations with Cerebrospinal Fluid Biomarkers and Cognitive Decline in Neurodegenerative Dementia. Journal of Alzheimer's Disease, 2022, 85, 431-442.	2.6	2
232	Theory and applications of diffusion MRI. , 2010, , .		1
233	Diffusion Magnetic Resonance Imaging and Fiber Tractography. PET Clinics, 2013, 8, 279-293.	3.0	1
234	Data-Driven Identification of the Regions of Interest for Fiber Tracking in Patients with Brain Tumors. World Neurosurgery, 2020, 143, e275-e284.	1.3	1

#	Article	IF	CITATIONS
235	Comparative characteristics of anthropometric indicators, level of physical and technical readiness of young players of 12 and 15 years of different playing fields. Health Sport Rehabilitation, 2019, 5, 44.	1.1	1
236	Diffusion MRI analysis methods. Advances in Magnetic Resonance Technology and Applications, 2021, , 147-156.	0.1	1
237	Improved neonatal brain MRI segmentation by interpolation of motion corrupted slices. Journal of Neuroimaging, 2022, 32, 480-492.	2.0	1
238	Impact of thresholding on the consistency and sensitivity of diffusion MRIâ€based brain networks in patients with cerebral small vessel disease. Brain and Behavior, 2022, , e2523.	2.2	1
239	The evaluation of a population based diffusion tensor image atlas using a ground truth method. Proceedings of SPIE, 2008, , .	0.8	0
240	2045 DIFFUSION TENSOR MRI AND TRACTOGRAPHY OF THE SACRAL PLEXUS. Journal of Urology, 2012, 187, .	0.4	0
241	MP7-03 IMAGING MICROSTRUCTURAL PROPERTIES OF THE KIDNEYS USING DIFFUSION TENSOR- MRI. Journal of Urology, 2014, 191, .	0.4	0
242	E18 Diffusion Tensor Imaging In Hd: A Two Year Follow-up - Results From The Track-hd Study. Journal of Neurology, Neurosurgery and Psychiatry, 2014, 85, A42-A42.	1.9	0
243	Neuroanatomical markers of psychotic experiences in adolescents: A machine-learning approach in a longitudinal population-based sample. NeuroImage: Clinical, 2022, 34, 102983.	2.7	0