Tim B Dyrby

List of Publications by Year
in descending order

78	5,596	159585 30	95266 68
papers	citations	h-index	g-index

93	93	93	6259
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The challenge of mapping the human connectome based on diffusion tractography. Nature Communications, 2017, 8, 1349.	12.8	956
2	Orientationally invariant indices of axon diameter and density from diffusion MRI. NeuroImage, 2010, 52, 1374-1389.	4.2	629
3	Accelerated Microstructure Imaging via Convex Optimization (AMICO) from diffusion MRI data. NeuroImage, 2015, 105, 32-44.	4.2	377
4	Using Diffusion Tractography to Predict Cortical Connection Strength and Distance: A Quantitative Comparison with Tracers in the Monkey. Journal of Neuroscience, 2016, 36, 6758-6770.	3.6	318
5	Imaging brain microstructure with diffusion MRI: practicality and applications. NMR in Biomedicine, 2019, 32, e3841.	2.8	266
6	Validation of in vitro probabilistic tractography. NeuroImage, 2007, 37, 1267-1277.	4.2	212
7	Limits to anatomical accuracy of diffusion tractography using modern approaches. NeuroImage, 2019, 185, 1-11.	4.2	200
8	An ex vivo imaging pipeline for producing highâ€quality and highâ€resolution diffusionâ€weighted imaging datasets. Human Brain Mapping, 2011, 32, 544-563.	3.6	199
9	Orientationally invariant metrics of apparent compartment eccentricity from double pulsed field gradient diffusion experiments. NMR in Biomedicine, 2013, 26, 1647-1662.	2.8	175
10	Conventions and nomenclature for double diffusion encoding NMR and MRI. Magnetic Resonance in Medicine, 2016, 75, 82-87.	3.0	154
11	Interpolation of diffusion weighted imaging datasets. NeuroImage, 2014, 103, 202-213.	4.2	122
12	The CONNECT project: Combining macro- and micro-structure. NeuroImage, 2013, 80, 273-282.	4.2	121
13	Contrast and stability of the axon diameter index from microstructure imaging with diffusion MRI. Magnetic Resonance in Medicine, 2013, 70, 711-721.	3.0	120
14	Natalizumab in progressive MS. Neurology, 2014, 82, 1499-1507.	1.1	110
15	Validation of tractography: Comparison with manganese tracing. Human Brain Mapping, 2015, 36, 4116-4134.	3.6	110
16	Image quality transfer and applications in diffusion MRI. NeuroImage, 2017, 152, 283-298.	4.2	91
17	Short parietal lobe connections of the human and monkey brain. Cortex, 2017, 97, 339-357.	2.4	74
18	Independent spinal cord atrophy measures correlate to motor and sensory deficits in individuals with spinal cord injury. Spinal Cord, 2011, 49, 70-75.	1.9	73

#	Article	IF	Citations
19	Validation strategies for the interpretation of microstructure imaging using diffusion MRI. NeuroImage, 2018, 182, 62-79.	4.2	73
20	The prefrontal cortex in the GÃ¶ttingen minipig brain defined by neural projection criteria and cytoarchitecture. Brain Research Bulletin, 2006, 70, 322-336.	3.0	56
21	Disentangling white-matter damage from physiological fibre orientation dispersion in multiple sclerosis. Brain Communications, 2020, 2, fcaa077.	3.3	55
22	Axon morphology is modulated by the local environment and impacts the noninvasive investigation of its structureâ€“function relationship. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33649-33659.	7.1	53
23	On the cortical connectivity in the macaque brain: A comparison of diffusion tractography and histological tracing data. NeuroImage, 2020, 221, 117201.	4.2	52
24	Segmentation of age-related white matter changes in a clinical multi-center study. NeuroImage, 2008, 41, 335-345.	4.2	51
25	Reproducibility of 5-HT2A receptor measurements and sample size estimations with [18F]altanserin PET using a bolus/infusion approach. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 910-915.	6.4	39
26	Expanded functional coupling of subcortical nuclei with the motor resting-state network in multiple sclerosis. Multiple Sclerosis Journal, 2013, 19, 559-566.	3.0	39
27	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
28	Differences in Frontal Network Anatomy Across Primate Species. Journal of Neuroscience, 2020, 40, 2094-2107.	3.6	37
29	High angular resolution diffusion imaging with stimulated echoes: compensation and correction in experiment design and analysis. NMR in Biomedicine, 2014, 27, 918-925.	2.8	35
30	Individual Differences in the Alignment of Structural and Functional Markers of the V5/MT Complex in Primates. Cerebral Cortex, 2016, 26, 3928-3944.	2.9	35
31	Resting-state connectivity of pre-motor cortex reflects disability in multiple sclerosis. Acta Neurologica Scandinavica, 2013, 128, n/a-n/a.	2.1	33
32	An Optimized Mouse Brain Atlas for Automated Mapping and Quantification of Neuronal Activity Using iDISCO+ and Light Sheet Fluorescence Microscopy. Neuroinformatics, 2021, 19, 433-446.	2.8	33
33	Simultaneous Assessment of White Matter Changes in Microstructure and Connectedness in the Blind Brain. Neural Plasticity, 2016, 2016, 1-12.	2.2	32
34	Thalamocortical Connectivity and Microstructural Changes in Congenital and Late Blindness. Neural Plasticity, 2017, 2017, 1-11.	2.2	31
35	Uncovering the inferior fronto-occipital fascicle and its topological organization in non-human primates: the missing connection for language evolution. Brain Structure and Function, 2019, 224, 1553-1567.	2.3	31
36	Validation of structural brain connectivity networks: The impact of scanning parameters. NeuroImage, 2020, 204, 116207.	4.2	31

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37	The Crossed Projection to the Striatum in Two Species of Monkey and in Humans: Behavioral and Evolutionary Significance. Cerebral Cortex, 2016, 27, bhw161.	2.9	30
38	Diffusion weighted imaging with circularly polarized oscillating gradients. Magnetic Resonance in Medicine, 2015, 73, 1171-1176.	3.0	29
39	Blindness alters the microstructure of the ventral but not the dorsal visual stream. Brain Structure and Function, 2016, 221, 2891-2903.	2.3	28
40	Prenatal stress produces sex-specific changes in depression-like behavior in rats: implications for increased vulnerability in females. Journal of Developmental Origins of Health and Disease, 2015, 6, 462-474.	1.4	27
41	Diversity of Cortico-descending Projections: Histological and Diffusion MRI Characterization in the Monkey. Cerebral Cortex, 2019, 29, 788-801.	2.9	27
42	Apparent exchange rate imaging in anisotropic systems. Magnetic Resonance in Medicine, 2014, 72, 756-762.	3.0	26
43	Distribution of collateral fibers in the monkey cervical spinal cord detected with diffusion-weighted magnetic resonance imaging. NeuroImage, 2011, 56, 923-929.	4.2	24
44	Monthly oral methylprednisolone pulse treatment in progressive multiple sclerosis. Multiple Sclerosis Journal, 2016, 22, 926-934.	3.0	23
45	Addressing the Path-Length-Dependency Confound in White Matter Tract Segmentation. PLoS ONE, 2014, 9, e96247.	2.5	22
46	Secondary Progressive and Relapsing Remitting Multiple Sclerosis Leads to Motor-Related Decreased Anatomical Connectivity. PLoS ONE, 2014, 9, e95540.	2.5	17
47	Commentary on Ã¢â‚¬Å“Microanisotropy imaging: quantification of microscopic diffusion anisotropy and orientation of order parameter by diffusion MRI with magic-angle spinning of the q-vectorÃ¢â‚¬Â• Frontiers in Physics, 2014, 2, .	2.1	16
48	Shape Abnormalities of the Caudate Nucleus Correlate with Poorer Gait and Balance: Results from a Subset of the LADIS Study. American Journal of Geriatric Psychiatry, 2015, 23, 59-71.e1.	1.2	16
49	Axon Diameter Mapping in Crossing Fibers with Diffusion MRI. Lecture Notes in Computer Science, 2011, 14, 82-89.	1.3	16
50	The porcine corticospinal decussation: A combined neuronal tracing and tractography study. Brain Research Bulletin, 2018, 142, 253-262.	3.0	14
51	Fast diffusion tensor imaging and tractography of the whole cervical spinal cord using point spread function corrected echo planar imaging. Magnetic Resonance in Medicine, 2013, 69, 144-149.	3.0	12
52	Limited Colocalization of Microbleeds and Microstructural Changes after Severe Traumatic Brain Injury. Journal of Neurotrauma, 2020, 37, 581-592.	3.4	12
53	Does powder averaging remove dispersion bias in diffusion MRI diameter estimates within real 3D axonal architectures?. NeuroImage, 2022, 248, 118718.	4.2	12
54	Muscle fibre morphology and microarchitecture in cerebral palsy patients obtained by 3D synchrotron X-ray computed tomography. Computers in Biology and Medicine, 2019, 107, 265-269.	7.0	11

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55	Effects of imaging gradients in sequences with varying longitudinal storage timeâ€"Case of diffusion exchange imaging. Magnetic Resonance in Medicine, 2018, 79, 2228-2235.	3.0	10
56	Magnetic resonance temporal diffusion tensor spectroscopy of disordered anisotropic tissue. Scientific Reports, 2018, 8, 2930.	3.3	9
57	Topological principles and developmental algorithms might refine diffusion tractography. Brain Structure and Function, 2019, 224, 1-8.	2.3	9
58	ActiveAx_{ADD}: Toward nonâ€parametric and orientationally invariant axon diameter distribution mapping using PGSE. Magnetic Resonance in Medicine, 2020, 83, 2322-2330.	3.0	9
59	Ex vivo diffusion-weighted MRI tractography of the GÃ¶ttingen minipig limbic system. Brain Structure and Function, 2020, 225, 1055-1071.	2.3	9
60	Cytosolic diffusivity and microscopic anisotropy of Nâ€acetyl aspartate in human white matter with diffusionâ€weighted MRS at 7 T. NMR in Biomedicine, 2021, 34, e4304.	2.8	9
61	Using connectomics for predictive assessment of brain parcellations. NeuroImage, 2021, 238, 118170.	4.2	9
62	Comparing Structural Brain Connectivity by the Infinite Relational Model. , 2013, , .		8
63	Functional and Structural Plasticity Co-express in a Left Premotor Region During Early Bimanual Skill Learning. Frontiers in Human Neuroscience, 2020, 14, 310.	2.0	8
64	The Diameters of Cortical Axons and Their Relevance to Neural Computing. , 2016, , 317-335.		7
65	In vivo tensor-valued diffusion MRI of focal demyelination in white and deep grey matter of rodents. NeuroImage: Clinical, 2021, 30, 102675.	2.7	7
66	Diagnostic Approach to Functional Recovery: Diffusion-Weighted Imaging and Tractography. Frontiers of Neurology and Neuroscience, 2013, 32, 26-35.	2.8	6
67	Disability in progressive MS is associated with T2 lesion changes. Multiple Sclerosis and Related Disorders, 2018, 20, 73-77.	2.0	6
68	Motor fatigue is associated with asymmetric connectivity properties of the corticospinal tract in multiple sclerosis. NeuroImage: Clinical, 2020, 28, 102393.	2.7	5
69	Sleep patterning changes in a prenatal stress model of depression. Journal of Developmental Origins of Health and Disease, 2018, 9, 102-111.	1.4	4
70	Axonal T2 estimation using the spherical variance of the strongly diffusion-weighted MRI signal. Magnetic Resonance Imaging, 2022, 86, 118-134.	1.8	4
71	Comparative Study Of Voxel-Based Statistical Analysis Methods For Fluorescently Labelled And Light Sheet Imaged Whole-Brain Samples. , 2021, , .		3
72	Nonparametric Bayesian clustering of structural whole brain connectivity in full image resolution. , 2014, , .		2

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73	Design and Implementation of Solenoid and Alderman-Grant Coils for Magnetic Resonance Microscopy at 7T. , 2020, , .		1
74	Tract-oriented statistical group comparison of diffusion in sheet-like white matter. , 2013, , .		0
75	Two Coarse Spatial Patterns of Altered Brain Microstructure Predict Post-traumatic Amnesia in the Subacute Stage of Severe Traumatic Brain Injury. Frontiers in Neurology, 2020, 11, 800.	2.4	0
76	No detectable effect on visual responses using functional MRI in a rodent model of Î±-synuclein expression. ENeuro, 2021, 8, ENEURO.0516-20.2021.	1.9	0
77	Editorial: Computational Neuroimage Analysis Tools for Brain (Diseases) Biomarkers. Frontiers in Neuroscience, 2022, 16, 841807.	2.8	0
78	Uncovering Cortical Units of Processing From Multi-Layered Connectomes. Frontiers in Neuroscience, 2022, 16, 836259.	2.8	0