Heidi Johansen-Berg

List of Publications by Year in descending order

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223 papers

51,017 citations

91 h-index 209 g-index

247 all docs

247 docs citations

times ranked

247

40184 citing authors

#	Article	IF	CITATIONS
1	Advances in functional and structural MR image analysis and implementation as FSL. NeuroImage, 2004, 23, S208-S219.	2.1	11,375
2	Tract-based spatial statistics: Voxelwise analysis of multi-subject diffusion data. NeuroImage, 2006, 31, 1487-1505.	2.1	5,755
3	Non-invasive mapping of connections between human thalamus and cortex using diffusion imaging. Nature Neuroscience, 2003, 6, 750-757.	7.1	2,131
4	Plasticity in gray and white: neuroimaging changes in brain structure during learning. Nature Neuroscience, 2012, 15, 528-536.	7.1	1,358
5	Training induces changes in white-matter architecture. Nature Neuroscience, 2009, 12, 1370-1371.	7.1	1,278
6	Function in the human connectome: Task-fMRI and individual differences in behavior. NeuroImage, 2013, 80, 169-189.	2.1	1,259
7	Polarity-Sensitive Modulation of Cortical Neurotransmitters by Transcranial Stimulation. Journal of Neuroscience, 2009, 29, 5202-5206.	1.7	771
8	Connectivity-Based Parcellation of Human Cingulate Cortex and Its Relation to Functional Specialization. Journal of Neuroscience, 2009, 29, 1175-1190.	1.7	734
9	The role of ipsilateral premotor cortex in hand movement after stroke. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14518-14523.	3.3	720
10	Anatomically related grey and white matter abnormalities in adolescent-onset schizophrenia. Brain, 2007, 130, 2375-2386.	3.7	718
11	Tools of the trade: psychophysiological interactions and functional connectivity. Social Cognitive and Affective Neuroscience, 2012, 7, 604-609.	1.5	676
12	Distinct and Overlapping Functional Zones in the Cerebellum Defined by Resting State Functional Connectivity. Cerebral Cortex, 2010, 20, 953-965.	1.6	647
13	Changes in connectivity profiles define functionally distinct regions in human medial frontal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13335-13340.	3.3	632
14	Tractography: Where Do We Go from Here?. Brain Connectivity, 2011, 1, 169-183.	0.8	542
15	Acquisition and voxelwise analysis of multi-subject diffusion data with Tract-Based Spatial Statistics. Nature Protocols, 2007, 2, 499-503.	5.5	526
16	Correlation between motor improvements and altered fMRI activity after rehabilitative therapy. Brain, 2002, 125, 2731-2742.	3.7	521
17	Functional–Anatomical Validation and Individual Variation of Diffusion Tractography-based Segmentation of the Human Thalamus. Cerebral Cortex, 2005, 15, 31-39.	1.6	514
18	The Role of GABA in Human Motor Learning. Current Biology, 2011, 21, 480-484.	1.8	496

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19	Diffusion-Weighted Imaging Tractography-Based Parcellation of the Human Parietal Cortex and Comparison with Human and Macaque Resting-State Functional Connectivity. Journal of Neuroscience, 2011, 31, 4087-4100.	1.7	446
20	Age-related changes in grey and white matter structure throughout adulthood. NeuroImage, 2010, 51, 943-951.	2.1	428
21	Diffusion MRI at 25: Exploring brain tissue structure and function. Neurolmage, 2012, 61, 324-341.	2.1	405
22	Polarity and timing-dependent effects of transcranial direct current stimulation in explicit motor learning. Neuropsychologia, 2011, 49, 800-804.	0.7	378
23	Quantitative Investigation of Connections of the Prefrontal Cortex in the Human and Macaque using Probabilistic Diffusion Tractography. Journal of Neuroscience, 2005, 25, 8854-8866.	1.7	371
24	Motor Skill Learning Induces Changes in White Matter Microstructure and Myelination. Journal of Neuroscience, 2013, 33, 19499-19503.	1.7	369
25	Diffusion-based tractography in neurological disorders: concepts, applications, and future developments. Lancet Neurology, The, 2008, 7, 715-727.	4.9	360
26	Longitudinal changes in grey and white matter during adolescence. NeuroImage, 2010, 49, 94-103.	2.1	352
27	Relationship between physiological measures of excitability and levels of glutamate and GABA in the human motor cortex. Journal of Physiology, 2011, 589, 5845-5855.	1.3	324
28	Diffusion-Weighted Imaging Tractography-Based Parcellation of the Human Lateral Premotor Cortex Identifies Dorsal and Ventral Subregions with Anatomical and Functional Specializations. Journal of Neuroscience, 2007, 27, 10259-10269.	1.7	303
29	Consensus paper: Combining transcranial stimulation with neuroimaging. Brain Stimulation, 2009, 2, 58-80.	0.7	299
30	Phantom pain is associated with preserved structure and function in the former hand area. Nature Communications, 2013, 4, 1570.	5.8	291
31	Using Diffusion Imaging to Study Human Connectional Anatomy. Annual Review of Neuroscience, 2009, 32, 75-94.	5.0	289
32	White Matter Plasticity in the Adult Brain. Neuron, 2017, 96, 1239-1251.	3.8	280
33	Functionally Specific Reorganization in Human Premotor Cortex. Neuron, 2007, 54, 479-490.	3.8	274
34	A common brain network links development, aging, and vulnerability to disease. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17648-17653.	3.3	268
35	Changes in white matter microstructure during adolescence. Neurolmage, 2008, 39, 52-61.	2.1	262
36	Ventral Striatum/Nucleus Accumbens Activation to Smoking-Related Pictorial Cues in Smokers and Nonsmokers: A Functional Magnetic Resonance Imaging Study. Biological Psychiatry, 2005, 58, 488-494.	0.7	259

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37	The Evolution of Prefrontal Inputs to the Cortico-pontine System: Diffusion Imaging Evidence from Macaque Monkeys and Humans. Cerebral Cortex, 2006, 16, 811-818.	1.6	258
38	Neurochemical Effects of Theta Burst Stimulation as Assessed by Magnetic Resonance Spectroscopy. Journal of Neurophysiology, 2009, 101, 2872-2877.	0.9	250
39	Between session reproducibility and between subject variability of diffusion MR and tractography measures. Neurolmage, 2006, 33, 867-877.	2.1	245
40	Diffusion imaging of whole, post-mortem human brains on a clinical MRI scanner. NeuroImage, 2011, 57, 167-181.	2.1	239
41	Accelerated Changes in White Matter Microstructure during Aging: A Longitudinal Diffusion Tensor Imaging Study. Journal of Neuroscience, 2014, 34, 15425-15436.	1.7	239
42	Towards an understanding of gait control: brain activation during the anticipation, preparation and execution of foot movements. Neurolmage, 2004, 21, 568-575.	2.1	225
43	Mutations in BMP4 Cause Eye, Brain, and Digit Developmental Anomalies: Overlap between the BMP4 and Hedgehog Signaling Pathways. American Journal of Human Genetics, 2008, 82, 304-319.	2.6	221
44	Studying neuroanatomy using MRI. Nature Neuroscience, 2017, 20, 314-326.	7.1	220
45	Integrity of white matter in the corpus callosum correlates with bimanual co-ordination skills. Neurolmage, 2007, 36, T16-T21.	2.1	218
46	Response-Selection-Related Parietal Activation during Number Comparison. Journal of Cognitive Neuroscience, 2004, 16, 1536-1551.	1.1	216
47	Unconscious vision: new insights into the neuronal correlate of blindsight using diffusion tractography. Brain, 2006, 129, 1822-1832.	3.7	210
48	Just pretty pictures? What diffusion tractography can add in clinical neuroscience. Current Opinion in Neurology, 2006, 19, 379-385.	1.8	209
49	The Effects of Aerobic Activity on Brain Structure. Frontiers in Psychology, 2012, 3, 86.	1.1	208
50	Network analysis detects changes in the contralesional hemisphere following stroke. NeuroImage, 2011, 54, 161-169.	2.1	204
51	A Tractography Analysis of Two Deep Brain Stimulation White Matter Targets for Depression. Biological Psychiatry, 2009, 65, 276-282.	0.7	203
52	A systematic review of MRI studies examining the relationship between physical fitness and activity and the white matter of the ageing brain. Neurolmage, 2016, 131, 81-90.	2.1	203
53	Functional anatomy of interhemispheric cortical connections in the human brain. Journal of Anatomy, 2006, 209, 311-320.	0.9	192
54	Distinction of seropositive NMO spectrum disorder and MS brain lesion distribution. Neurology, 2013, 80, 1330-1337.	1.5	189

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55	Modulation of GABA and resting state functional connectivity by transcranial direct current stimulation. ELife, 2015, 4, e08789.	2.8	184
56	Connectivity-based parcellation of human cortex using diffusion MRI: Establishing reproducibility, validity and observer independence in BA 44/45 and SMA/pre-SMA. NeuroImage, 2007, 34, 204-211.	2.1	182
57	Topography of cortical and subcortical connections of the human pedunculopontine and subthalamic nuclei. Neurolmage, 2007, 37, 694-705.	2.1	182
58	Ipsilesional anodal tDCS enhances the functional benefits of rehabilitation in patients after stroke. Science Translational Medicine, 2016, 8, 330re1.	5.8	178
59	Probabilistic diffusion tractography: a potential tool to assess the rate of disease progression in amyotrophic lateral sclerosis. Brain, 2006, 129, 1859-1871.	3.7	177
60	Poor sleep quality is associated with increased cortical atrophy in community-dwelling adults. Neurology, 2014, 83, 967-973.	1.5	176
61	Attention to movement modulates activity in sensori-motor areas, including primary motor cortex. Experimental Brain Research, 2002, 142, 13-24.	0.7	174
62	Topography of connections between human prefrontal cortex and mediodorsal thalamus studied with diffusion tractography. Neurolmage, 2010, 51, 555-564.	2.1	165
63	Glial Biology in Learning and Cognition. Neuroscientist, 2014, 20, 426-431.	2.6	165
64	Changes in white matter microstructure in the developing brain—A longitudinal diffusion tensor imaging study of children from 4 to 11 years of age. NeuroImage, 2016, 124, 473-486.	2.1	160
65	Local GABA concentration is related to network-level resting functional connectivity. ELife, 2014, 3, e01465.	2.8	157
66	Modulation of movementâ€essociated cortical activation by transcranial direct current stimulation. European Journal of Neuroscience, 2009, 30, 1412-1423.	1.2	156
67	Cortical activation changes underlying stimulation-induced behavioural gains in chronic stroke. Brain, 2012, 135, 276-284.	3.7	156
68	Reassessing cortical reorganization in the primary sensorimotor cortex following arm amputation. Brain, 2015, 138, 2140-2146.	3.7	153
69	Behavioural relevance of variation in white matter microstructure. Current Opinion in Neurology, 2010, 23, 351-358.	1.8	152
70	Altered Hemodynamic Responses in Patients After Subcortical Stroke Measured by Functional MRI. Stroke, 2002, 33, 103-109.	1.0	151
71	Predicting behavioural response to TDCS in chronic motor stroke. Neurolmage, 2014, 85, 924-933.	2.1	150
72	Attention to touch modulates activity in both primary and secondary somatosensory areas. NeuroReport, 2000, 11, 1237-1241.	0.6	147

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73	Brain Activity Changes Associated With Treadmill Training After Stroke. Stroke, 2009, 40, 2460-2467.	1.0	138
74	Structural and functional bases for individual differences in motor learning. Human Brain Mapping, 2011, 32, 494-508.	1.9	136
75	What are we measuring with GABA Magnetic Resonance Spectroscopy?. Communicative and Integrative Biology, 2011, 4, 573-575.	0.6	136
76	A combined post-mortem magnetic resonance imaging and quantitative histological study of multiple sclerosis pathology. Brain, 2012, 135, 2938-2951.	3.7	131
77	A systematic review and meta-analysis of cross-sectional studies examining the relationship between mobility and cognition in healthy older adults. Gait and Posture, 2016, 50, 164-174.	0.6	131
78	Functional specificity of human premotor–motor cortical interactions during action selection. European Journal of Neuroscience, 2007, 26, 2085-2095.	1.2	128
79	Neuroplasticity and functional recovery in multiple sclerosis. Nature Reviews Neurology, 2012, 8, 635-646.	4.9	128
80	Individual Differences in White-Matter Microstructure Reflect Variation in Functional Connectivity during Choice. Current Biology, 2007, 17, 1426-1431.	1.8	124
81	Investigation of white matter pathology in ALS and PLS using tractâ€based spatial statistics. Human Brain Mapping, 2009, 30, 615-624.	1.9	123
82	Multi-modal characterization of rapid anterior hippocampal volume increase associated with aerobic exercise. Neurolmage, 2016 , 131 , 162 - 170 .	2.1	119
83	The effect of hypointense white matter lesions on automated gray matter segmentation in multiple sclerosis. Human Brain Mapping, 2012, 33, 2802-2814.	1.9	116
84	Neuroimaging in Stroke Recovery: A Position Paper from the First International Workshop on Neuroimaging and Stroke Recovery. Cerebrovascular Diseases, 2004, 18, 260-267.	0.8	115
85	White matter integrity in the vicinity of Broca's area predicts grammar learning success. Neurolmage, 2009, 47, 1974-1981.	2.1	114
86	Connectivity of the human pedunculopontine nucleus region and diffusion tensor imaging in surgical targeting. Journal of Neurosurgery, 2007, 107, 814-820.	0.9	113
87	Myelin water imaging reflects clinical variability in multiple sclerosis. Neurolmage, 2012, 60, 263-270.	2.1	110
88	GABA Levels Are Decreased After Stroke and GABA Changes During Rehabilitation Correlate With Motor Improvement. Neurorehabilitation and Neural Repair, 2015, 29, 278-286.	1.4	110
89	Fornix Microstructure Correlates with Recollection But Not Familiarity Memory. Journal of Neuroscience, 2009, 29, 14987-14992.	1.7	109
90	Advances in noninvasive myelin imaging. Developmental Neurobiology, 2018, 78, 136-151.	1.5	107

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91	The role of diffusion MRI in neuroscience. NMR in Biomedicine, 2019, 32, e3762.	1.6	107
92	Revealing the neural fingerprints of a missing hand. ELife, 2016, 5, .	2.8	107
93	Ventral Premotor Cortex May Be Required for Dynamic Changes in the Feeling of Limb Ownership: A Lesion Study. Journal of Neuroscience, 2011, 31, 4852-4857.	1.7	102
94	Investigating the Stability of Fine-Grain Digit Somatotopy in Individual Human Participants. Journal of Neuroscience, 2016, 36, 1113-1127.	1.7	102
95	Prefrontal Cortex Activation While Walking Under Dual-Task Conditions in Stroke. Neurorehabilitation and Neural Repair, 2016, 30, 591-599.	1.4	100
96	Structural Plasticity: Rewiring the Brain. Current Biology, 2007, 17, R141-R144.	1.8	98
97	Functional MRI Correlates of Lower Limb Function in Stroke Victims With Gait Impairment. Stroke, 2008, 39, 1507-1513.	1.0	98
98	Changes in functional connectivity and GABA levels with long-term motor learning. NeuroImage, 2015, 106, 15-20.	2.1	95
99	Model-free characterization of brain functional networks for motor sequence learning using fMRI. Neurolmage, 2008, 39, 1950-1958.	2.1	94
100	Discordant white matter N-acetylasparate and diffusion MRI measures suggest that chronic metabolic dysfunction contributes to axonal pathology in multiple sclerosis. NeuroImage, 2007, 36, 19-27.	2.1	93
101	Deprivation-related and use-dependent plasticity go hand in hand. ELife, 2013, 2, e01273.	2.8	93
102	Polarity-specific effects of motor transcranial direct current stimulation on fMRI resting state networks. NeuroImage, 2014, 88, 155-161.	2.1	92
103	Network-level reorganisation of functional connectivity following arm amputation. NeuroImage, 2015, 114, 217-225.	2.1	91
104	Reliable identification of the auditory thalamus using multi-modal structural analyses. NeuroImage, 2006, 30, 1112-1120.	2.1	89
105	Effects of Acute Nicotine Abstinence on Cue-elicited Ventral Striatum/Nucleus Accumbens Activation in Female Cigarette Smokers: A Functional Magnetic Resonance Imaging Study. Brain Imaging and Behavior, 2007, 1, 43-57.	1.1	89
106	Associations between selfâ€reported sleep quality and white matter in communityâ€dwelling older adults: A prospective cohort study. Human Brain Mapping, 2017, 38, 5465-5473.	1.9	87
107	Structural Plasticity in Adulthood with Motor Learning and Stroke Rehabilitation. Annual Review of Neuroscience, 2018, 41, 25-40.	5.0	85
108	Enhancing the alignment of the preclinical and clinical stroke recovery research pipeline: Consensus-based core recommendations from the Stroke Recovery and Rehabilitation Roundtable translational working group. International Journal of Stroke, 2017, 12, 462-471.	2.9	82

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109	What are we measuring with GABA magnetic resonance spectroscopy?. Communicative and Integrative Biology, 2011, 4, 573-5.	0.6	82
110	Gray matter volume is associated with rate of subsequent skill learning after a long term training intervention. NeuroImage, 2014, 96, 158-166.	2.1	78
111	Myelin plasticity and behaviour â€" connecting the dots. Current Opinion in Neurobiology, 2017, 47, 86-92.	2.0	78
112	Connectivity of an effective hypothalamic surgical target for cluster headache. Journal of Clinical Neuroscience, 2007, 14, 955-960.	0.8	77
113	Relating functional changes during hand movement to clinical parameters in patients with multiple sclerosis in a multiâ€eentre fMRI study. European Journal of Neurology, 2008, 15, 113-122.	1.7	75
114	Human Structural Plasticity at Record Speed. Neuron, 2012, 73, 1058-1060.	3.8	75
115	Relationships of brain white matter microstructure with clinical and MR measures in relapsingâ€remitting multiple sclerosis. Journal of Magnetic Resonance Imaging, 2010, 31, 309-316.	1.9	73
116	Representation of Multiple Body Parts in the Missing-Hand Territory of Congenital One-Handers. Current Biology, 2017, 27, 1350-1355.	1.8	71
117	Connectivity of the human periventricular—periaqueductal gray region. Journal of Neurosurgery, 2005, 103, 1030-1034.	0.9	70
118	Walking performance and its recovery in chronic stroke in relation to extent of lesion overlap with the descending motor tract. Experimental Brain Research, 2008, 186, 325-333.	0.7	70
119	The Homeostatic Interaction Between Anodal Transcranial Direct Current Stimulation and Motor Learning in Humans is Related to GABAA Activity. Brain Stimulation, 2015, 8, 898-905.	0.7	70
120	Preservation of motor skill learning in patients with multiple sclerosis. Multiple Sclerosis Journal, 2011, 17, 103-115.	1.4	69
121	Relationships between functional and structural corticospinal tract integrity and walking post stroke. Clinical Neurophysiology, 2012, 123, 2422-2428.	0.7	69
122	The rate of visuomotor adaptation correlates with cerebellar whiteâ€matter microstructure. Human Brain Mapping, 2009, 30, 4048-4053.	1.9	66
123	Reaffirming the link between chronic phantom limb pain and maintained missing hand representation. Cortex, 2018, 106, 174-184.	1.1	66
124	Visualization of Altered Neurovascular Coupling in Chronic Stroke Patients using Multimodal Functional MRI. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 2044-2054.	2.4	64
125	Enhancing the Alignment of the Preclinical and Clinical Stroke Recovery Research Pipeline: Consensus-Based Core Recommendations From the Stroke Recovery and Rehabilitation Roundtable Translational Working Group. Neurorehabilitation and Neural Repair, 2017, 31, 699-707.	1.4	64
126	Relating Brain Damage to Brain Plasticity in Patients With Multiple Sclerosis. Neurorehabilitation and Neural Repair, 2012, 26, 581-593.	1.4	61

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127	Myelin imaging in amyotrophic and primary lateral sclerosis. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2013, 14, 562-573.	1.1	59
128	Evaluation of the Modifid Jebsen Test of Hand Function and the University of Maryland Arm Questionnaire for Stroke. Clinical Rehabilitation, 2004, 18, 195-202.	1.0	58
129	Two-dimensional population map of cortical connections in the human internal capsule. Journal of Magnetic Resonance Imaging, 2007, 25, 48-54.	1.9	56
130	White matter integrity as a marker for cognitive plasticity in aging. Neurobiology of Aging, 2016, 47, 74-82.	1.5	56
131	Structural correlates of skilled performance on a motor sequence task. Frontiers in Human Neuroscience, 2012, 6, 289.	1.0	55
132	Modulating Regional Motor Cortical Excitability with Noninvasive Brain Stimulation Results in Neurochemical Changes in Bilateral Motor Cortices. Journal of Neuroscience, 2018, 38, 7327-7336.	1.7	55
133	Neural basis of induced phantom limb pain relief. Annals of Neurology, 2019, 85, 59-73.	2.8	54
134	A consistent relationship between local white matter architecture and functional specialisation in medial frontal cortex. NeuroImage, 2006, 30, 220-227.	2.1	53
135	Artificial limb representation in amputees. Brain, 2018, 141, 1422-1433.	3.7	53
136	Impairment of movement-associated brain deactivation in multiple sclerosis: further evidence for a functional pathology of interhemispheric neuronal inhibition. Experimental Brain Research, 2008, 187, 25-31.	0.7	52
137	Motor Practice Promotes Increased Activity in Brain Regions Structurally Disconnected After Subcortical Stroke. Neurorehabilitation and Neural Repair, 2011, 25, 607-616.	1.4	52
138	Induced sensorimotor cortex plasticity remediates chronic treatment-resistant visual neglect. ELife, 2017, 6, .	2.8	52
139	Human connectomics — What will the future demand?. NeuroImage, 2013, 80, 541-544.	2.1	50
140	Reproducibility of fMRI in the clinical setting: Implications for trial designs. NeuroImage, 2008, 42, 603-610.	2.1	49
141	Development of white matter microstructure in relation to verbal and visuospatial working memory—A longitudinal study. PLoS ONE, 2018, 13, e0195540.	1.1	48
142	Imaging Surrogates of Disease Activity in Neuromyelitis Optica Allow Distinction from Multiple Sclerosis. PLoS ONE, 2015, 10, e0137715.	1.1	47
143	Studying the Effects of Transcranial Direct-Current Stimulation in Stroke Recovery Using Magnetic Resonance Imaging. Frontiers in Human Neuroscience, 2013, 7, 857.	1.0	46
144	Associations between Mobility, Cognition, and Brain Structure in Healthy Older Adults. Frontiers in Aging Neuroscience, 2017, 9, 155.	1.7	44

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145	A critical evaluation of systematic reviews assessing the effect of chronic physical activity on academic achievement, cognition and the brain in children and adolescents: a systematic review. International Journal of Behavioral Nutrition and Physical Activity, 2020, 17, 79.	2.0	44
146	Functional Imaging of Stroke Recovery: What Have We Learnt and Where Do We Go from Here?. International Journal of Stroke, 2007, 2, 7-16.	2.9	43
147	Relevance of Structural Brain Connectivity to Learning and Recovery from Stroke. Frontiers in Systems Neuroscience, 2010, 4, 146.	1.2	43
148	Autoantibodies to glutamic acid decarboxylase in patients with epilepsy are associated with low cortical GABA levels. Epilepsia, 2010, 51, 1898-1901.	2.6	43
149	Differences in integrity of white matter and changes with training in spelling impaired children: a diffusion tensor imaging study. Brain Structure and Function, 2012, 217, 747-760.	1.2	43
150	White matter abnormalities in methcathinone abusers with an extrapyramidal syndrome. Brain, 2010, 133, 3676-3684.	3.7	42
151	Sleep-dependent motor memory consolidation in older adults depends on task demands. Neurobiology of Aging, 2015, 36, 1409-1416.	1.5	42
152	Normalisation of brain connectivity through compensatory behaviour, despite congenital hand absence. ELife, 2015, 4, .	2.8	41
153	Perceptually relevant remapping of human somatotopy in 24 hours. ELife, 2016, 5, .	2.8	40
154	Short-term adaptation to a simple motor task: A physiological process preserved in multiple sclerosis. NeuroImage, 2009, 45, 500-511.	2.1	38
155	The future of functionally-related structural change assessment. Neurolmage, 2012, 62, 1293-1298.	2.1	38
156	Cognition and mobility show a global association in middle- and late-adulthood: Analyses from the Canadian Longitudinal Study on Aging. Gait and Posture, 2018, 64, 238-243.	0.6	38
157	Effects of a programme of vigorous physical activity during secondary school physical education on academic performance, fitness, cognition, mental health and the brain of adolescents (Fit to Study): study protocol for a cluster-randomised trial. Trials, 2019, 20, 189.	0.7	37
158	Motor correlates of phantom limb pain. Cortex, 2017, 95, 29-36.	1.1	36
159	An Ultra-High Field Magnetic Resonance Spectroscopy Study of Post Exercise Lactate, Glutamate and Glutamine Change in the Human Brain. Frontiers in Physiology, 2015, 6, 351.	1.3	35
160	Sleep Disruption After Brain Injury Is Associated With Worse Motor Outcomes and Slower Functional Recovery. Neurorehabilitation and Neural Repair, 2020, 34, 661-671.	1.4	35
161	e-publishing debate. Trends in Cognitive Sciences, 2001, 5, 469.	4.0	34
162	Probabilistic tractography of the optic radiations—An automated method and anatomical validation. Neurolmage, 2010, 49, 2001-2012.	2.1	32

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163	White matter structure and myelin-related gene expression alterations with experience in adult rats. Progress in Neurobiology, 2020, 187, 101770.	2.8	30
164	Sleep and Motor Learning: Implications for Physical Rehabilitation After Stroke. Frontiers in Neurology, 2015, 6, 241.	1.1	29
165	Structural Variability in the Human Brain Reflects Fine-Grained Functional Architecture at the Population Level. Journal of Neuroscience, 2019, 39, 6136-6149.	1.7	29
166	Transfer of tactile perceptual learning to untrained neighboring fingers reflects natural use relationships. Journal of Neurophysiology, 2016, 115, 1088-1097.	0.9	28
167	Maternal antibody-mediated dyslexia? Evidence for a pathogenic serum factor in a mother of two dyslexic children shown by transfer to mice using behavioural studies and magnetic resonance spectroscopy. Journal of Neuroimmunology, 2002, 130, 243-247.	1.1	27
168	A community-based physical activity intervention to prevent mobility-related disability for retired older people (REtirement in ACTion (REACT)): study protocol for a randomised controlled trial. Trials, 2018, 19, 228.	0.7	26
169	Effect of a physical activity and behaviour maintenance programme on functional mobility decline in older adults: the REACT (Retirement in Action) randomised controlled trial. Lancet Public Health, The, 2022, 7, e316-e326.	4.7	26
170	Cognitive Context Determines Dorsal Premotor Cortical Activity During Hand Movement in Patients After Stroke, 2011, 42, 1056-1061.	1.0	24
171	The effect of a one-year vigorous physical activity intervention on fitness, cognitive performance and mental health in young adolescents: the Fit to Study cluster randomised controlled trial. International Journal of Behavioral Nutrition and Physical Activity, 2021, 18, 47.	2.0	23
172	Relating diffusion tensor imaging measurements to microstructural quantities in the cerebral cortex in multiple sclerosis. Human Brain Mapping, 2019, 40, 4417-4431.	1.9	21
173	Imaging the effects of rTMS-induced cortical plasticity. Restorative Neurology and Neuroscience, 2010, 28, 425-436.	0.4	20
174	Associations between fitness, physical activity and mental health in a community sample of young British adolescents: baseline data from the Fit to Study trial. BMJ Open Sport and Exercise Medicine, 2020, 6, e000819.	1.4	20
175	Individual Differences in White Matter Microstructure in the Healthy Brain., 2014,, 301-316.		19
176	Transcranial direct current stimulation for promoting motor function in cerebral palsy: a review. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 121.	2.4	18
177	The effects of an aerobic training intervention on cognition, grey matter volumes and white matter microstructure. Physiology and Behavior, 2020, 223, 112923.	1.0	18
178	Imaging white matter diffusion changes with development and recovery from brain injury. Developmental Neurorehabilitation, 2008, $11,174-186$.	0.5	16
179	Neuroplasticity: Effects of Physical and Cognitive activity on brain structure and function. Neurolmage, 2016, 131, 1-3.	2.1	16
180	Increasing Lateralized Motor Activity in Younger and Older Adults using Real-time fMRI during Executed Movements. Neuroscience, 2018, 378, 165-174.	1.1	15

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181	Functional Strength Training and Movement Performance Therapy for Upper Limb Recovery Early Poststroke—Efficacy, Neural Correlates, Predictive Markers, and Cost-Effectiveness: FAST-INdiCATE Trial. Frontiers in Neurology, 2017, 8, 733.	1.1	15
182	The NMDA receptor partial agonist d-cycloserine does not enhance motor learning. Journal of Psychopharmacology, 2016, 30, 994-999.	2.0	12
183	Self-Reported and Objective Sleep Measures in Stroke Survivors With Incomplete Motor Recovery at the Chronic Stage. Neurorehabilitation and Neural Repair, 2021, 35, 851-860.	1.4	12
184	Functional strength training versus movement performance therapy for upper limb motor recovery early after stroke: a RCT. Efficacy and Mechanism Evaluation, 2018, 5, 1-112.	0.9	12
185	Are People Ready for Personalized Brain Health? Perspectives of Research Participants in the Lifebrain Consortium. Gerontologist, The, 2020, 60, 1050-1059.	2.3	11
186	Dual-task walking and automaticity after Stroke: Insights from a secondary analysis and imaging sub-study of a randomised controlled trial. Clinical Rehabilitation, 2021, 35, 026921552110173.	1.0	10
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