Mark E Bastin

List of Publications by Citations

263 papers	12,185 citations	58 h-index	101 g-index
293 ext. papers	15,209 ext. citations	6.7 avg, IF	5.9 L-index

#	Paper	IF	Citations
263	Common genetic variants influence human subcortical brain structures. *Nature*, **2015**, 520, 224-9	50.4	601
262	The ENIGMA Consortium: large-scale collaborative analyses of neuroimaging and genetic data. *Brain Imaging and Behavior*, **2014**, 8, 153-82	4.1	539
261	Identification of common variants associated with human hippocampal and intracranial volumes. *Nature Genetics*, **2012**, 44, 552-61	36.3	498
260	Sex Differences in the Adult Human Brain: Evidence from 5216 UK Biobank Participants. *Cerebral Cortex*, **2018**, 28, 2959-2975	5.1	335
259	Multi-site genetic analysis of diffusion images and voxelwise heritability analysis: a pilot project of the ENIGMA-DTI working group. *NeuroImage*, **2013**, 81, 455-469	7.9	278
258	Brain age predicts mortality. *Molecular Psychiatry*, **2018**, 23, 1385-1392	15.1	260
257	A general factor of brain white matter integrity predicts information processing speed in healthy older people. *Journal of Neuroscience*, **2010**, 30, 7569-74	6.6	236
256	White matter abnormalities in bipolar disorder and schizophrenia detected using diffusion tensor magnetic resonance imaging. *Bipolar Disorders*, **2009**, 11, 11-8	3.8	222
255	Brain white matter tract integrity as a neural foundation for general intelligence. *Molecular Psychiatry*, **2012**, 17, 1026-30	15.1	219
254	White matter tractography in bipolar disorder and schizophrenia. *Biological Psychiatry*, **2008**, 64, 1088-92	7.9	212
253	Ageing and brain white matter structure in 3,513 UK Biobank participants. *Nature Communications*, **2016**, 7, 13629	17.4	207
252	Visualization of image data from cells to organisms. *Nature Methods*, **2010**, 7, S26-41	21.6	189
251	Mapping cortical brain asymmetry in 17,141 healthy individuals worldwide via the ENIGMA Consortium. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E5154-E5163	11.5	182
250	Novel genetic loci associated with hippocampal volume. *Nature Communications*, **2017**, 8, 13624	17.4	173
249	The effects of a neuregulin 1 variant on white matter density and integrity. *Molecular Psychiatry*, **2008**, 13, 1054-9	15.1	170
248	Diffusion tensor MR imaging of high-grade cerebral gliomas. *American Journal of Neuroradiology*, **2002**, 23, 520-7	4.4	170
247	A theoretical study of the effect of experimental noise on the measurement of anisotropy in diffusion imaging. *Magnetic Resonance Imaging*, **1998**, 16, 773-85	3.3	166

246	White matter hyperintensities and normal-appearing white matter integrity in the aging brain. *Neurobiology of Aging*, **2015**, 36, 909-18	5.6	163
245	Heritability of fractional anisotropy in human white matter: a comparison of Human Connectome Project and ENIGMA-DTI data. *NeuroImage*, **2015**, 111, 300-11	7.9	159
244	The genetic architecture of the human cerebral cortex. *Science*, **2020**, 367,	33.3	156
243	Total MRI load of cerebral small vessel disease and cognitive ability in older people. *Neurobiology of Aging*, **2015**, 36, 2806-11	5.6	151
242	Brain aging, cognition in youth and old age and vascular disease in the Lothian Birth Cohort 1936: rationale, design and methodology of the imaging protocol. *International Journal of Stroke*, **2011**, 6, 547-59	6.3	150
241	Novel genetic loci underlying human intracranial volume identified through genome-wide association. *Nature Neuroscience*, **2016**, 19, 1569-1582	25.5	147
240	Neuroprotective lifestyles and the aging brain: activity, atrophy, and white matter integrity. *Neurology*, **2012**, 79, 1802-8	6.5	138
239	Vascular risk factors, large-artery atheroma, and brain white matter hyperintensities. *Neurology*, **2014**, 82, 1331-8	6.5	136
238	White matter integrity in individuals at high genetic risk of bipolar disorder. *Biological Psychiatry*, **2011**, 70, 350-6	7.9	109
237	Test-retest reliability of structural brain networks from diffusion MRI. *NeuroImage*, **2014**, 86, 231-43	7.9	102
236	Diffusion tensor imaging (DTI) and proton magnetic resonance spectroscopy (1H MRS) in schizophrenic subjects and normal controls. *Psychiatry Research - Neuroimaging*, **2001**, 106, 161-70	2.9	99
235	Associations between vascular risk factors and brain MRI indices in UK Biobank. *European Heart Journal*, **2019**, 40, 2290-2300	9.5	97
234	Multi-site study of additive genetic effects on fractional anisotropy of cerebral white matter: Comparing meta and megaanalytical approaches for data pooling. *NeuroImage*, **2014**, 95, 136-50	7.9	95
233	Polygenic risk and white matter integrity in individuals at high risk of mood disorder. *Biological Psychiatry*, **2013**, 74, 280-6	7.9	94
232	Blood pressure, internal carotid artery flow parameters, and age-related white matter hyperintensities. *Hypertension*, **2014**, 63, 1011-8	8.5	93
231	Brain iron deposits are associated with general cognitive ability and cognitive aging. *Neurobiology of Aging*, **2012**, 33, 510-517.e2	5.6	88
230	Human subcortical brain asymmetries in 15,847 people worldwide reveal effects of age and sex. *Brain Imaging and Behavior*, **2017**, 11, 1497-1514	4.1	87
229	A diffusion tensor MRI study of white matter integrity in subjects at high genetic risk of schizophrenia. *Schizophrenia Research*, **2008**, 106, 132-9	3.6	87

228	MRI correlates of episodic memory in Alzheimer's disease, mild cognitive impairment, and healthy aging. *Psychiatry Research - Neuroimaging*, **2010**, 184, 57-62	2.9	86
227	Correction of eddy current-induced artefacts in diffusion tensor imaging using iterative cross-correlation. *Magnetic Resonance Imaging*, **1999**, 17, 1011-24	3.3	85
226	Circulating inflammatory markers are associated with magnetic resonance imaging-visible perivascular spaces but not directly with white matter hyperintensities. *Stroke*, **2014**, 45, 605-7	6.7	81
225	Genetic architecture of subcortical brain structures in 38,851 individuals. *Nature Genetics*, **2019**, 51, 1624-1636	30.5	81
224	Childhood cognitive ability accounts for associations between cognitive ability and brain cortical thickness in old age. *Molecular Psychiatry*, **2014**, 19, 555-9	15.1	80
223	Beyond a bigger brain: Multivariable structural brain imaging and intelligence. *Intelligence*, **2015**, 51, 47-56	3	77
222	Close correlation between quantitative and qualitative assessments of white matter lesions. *Neuroepidemiology*, **2013**, 40, 13-22	5.4	74
221	Mediterranean-type diet and brain structural change from 73 to 76 years in a Scottish cohort. *Neurology*, **2017**, 88, 449-455	6.5	73
220	Measurement of brain temperature with magnetic resonance spectroscopy in acute ischemic stroke. *Annals of Neurology*, **2006**, 60, 438-46	9.4	72
219	Measurements of water diffusion and T1 values in peritumoural oedematous brain. *NeuroReport*, **2002**, 13, 1335-40	1.7	72
218	A probabilistic model-based approach to consistent white matter tract segmentation. *IEEE Transactions on Medical Imaging*, **2007**, 26, 1555-61	11.7	71
217	Gliovascular disruption and cognitive deficits in a mouse model with features of small vessel disease. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 1005-14	7.3	70
216	Coupled changes in brain white matter microstructure and fluid intelligence in later life. *Journal of Neuroscience*, **2015**, 35, 8672-82	6.6	69
215	Association between preterm brain injury and exposure to chorioamnionitis during fetal life. *Scientific Reports*, **2016**, 6, 37932	4.9	67
214	White matter microstructural abnormalities in euthymic bipolar disorder. *British Journal of Psychiatry*, **2010**, 196, 52-8	5.4	66
213	Single subject fMRI test-retest reliability metrics and confounding factors. *NeuroImage*, **2013**, 69, 231-43	7.9	64
212	Brain white matter damage in aging and cognitive ability in youth and older age. *Neurobiology of Aging*, **2013**, 34, 2740-7	5.6	64
211	Prenatal methadone exposure is associated with altered neonatal brain development. *NeuroImage: Clinical*, **2018**, 18, 9-14	5.3	63

210	Studying synapses in human brain with array tomography and electron microscopy. *Nature Protocols*, **2013**, 8, 1366-80	18.8	63
209	Diffusion tensor and magnetization transfer MRI measurements of periventricular white matter hyperintensities in old age. *Neurobiology of Aging*, **2009**, 30, 125-36	5.6	63
208	Impact of small vessel disease in the brain on gait and balance. *Scientific Reports*, **2017**, 7, 41637	4.9	59
207	Estimated maximal and current brain volume predict cognitive ability in old age. *Neurobiology of Aging*, **2013**, 34, 2726-33	5.6	58
206	Quantitative assessment of intracranial tumor response to dexamethasone using diffusion, perfusion and permeability magnetic resonance imaging. *Magnetic Resonance Imaging*, **2007**, 25, 303-10	3.3	58
205	A systematic review of the utility of 1.5 versus 3 Tesla magnetic resonance brain imaging in clinical practice and research. *European Radiology*, **2012**, 22, 2295-303	8	57
204	Measurement of regional brain temperature using proton spectroscopic imaging: validation and application to acute ischemic stroke. *Magnetic Resonance Imaging*, **2006**, 24, 699-706	3.3	56
203	Subcortical volume and white matter integrity abnormalities in major depressive disorder: findings from UK Biobank imaging data. *Scientific Reports*, **2017**, 7, 5547	4.9	55
202	Executive deficits, not processing speed relates to abnormalities in distinct prefrontal tracts in amyotrophic lateral sclerosis. *Brain*, **2013**, 136, 3290-304	11.2	55
201	TractoR: Magnetic Resonance Imaging and Tractography withR. *Journal of Statistical Software*, **2011**, 44,	7.3	55
200	Brain atrophy associations with white matter lesions in the ageing brain: the Lothian Birth Cohort 1936. *European Radiology*, **2013**, 23, 1084-92	8	54
199	Brain volumetric changes and cognitive ageing during the eighth decade of life. *Human Brain Mapping*, **2015**, 36, 4910-25	5.9	53
198	Association of allostatic load with brain structure and cognitive ability in later life. *Neurobiology of Aging*, **2015**, 36, 1390-9	5.6	52
197	Brain white matter structure and information processing speed in healthy older age. *Brain Structure and Function*, **2016**, 221, 3223-35	4	49
196	Vascular risk factors and progression of white matter hyperintensities in the Lothian Birth Cohort 1936. *Neurobiology of Aging*, **2016**, 42, 116-23	5.6	49
195	White matter integrity as an intermediate phenotype: exploratory genome-wide association analysis in individuals at high risk of bipolar disorder. *Psychiatry Research*, **2013**, 206, 223-31	9.9	49
194	Memory binding and white matter integrity in familial Alzheimer's disease. *Brain*, **2015**, 138, 1355-69	11.2	49
193	Higher systolic blood pressure is associated with increased water diffusivity in normal-appearing white matter. *Stroke*, **2009**, 40, 3869-71	6.7	49

192	Early breast milk exposure modifies brain connectivity in preterm infants. *NeuroImage*, **2019**, 184, 431-439	7.9	49
191	Alzheimer's disease susceptibility genes APOE and TOMM40, and brain white matter integrity in the Lothian Birth Cohort 1936. *Neurobiology of Aging*, **2014**, 35, 1513.e25-33	5.6	47
190	Processing speed and the relationship between Trail Making Test-B performance, cortical thinning and white matter microstructure in older adults. *Cortex*, **2017**, 95, 92-103	3.8	47
189	Quantifying the effects of normal ageing on white matter structure using unsupervised tract shape modelling. *NeuroImage*, **2010**, 51, 1-10	7.9	47
188	On the use of water phantom images to calibrate and correct eddy current induced artefacts in MR diffusion tensor imaging. *Magnetic Resonance Imaging*, **2000**, 18, 681-7	3.3	47
187	A comparison of location of acute symptomatic vs. 'silent' small vessel lesions. *International Journal of Stroke*, **2015**, 10, 1044-50	6.3	45
186	MRI is a sensitive marker of subtle white matter pathology in hypoperfused mice. *Neurobiology of Aging*, **2011**, 32, 2325.e1-6	5.6	44
185	Visualization and analysis of white matter structural asymmetry in diffusion tensor MRI data. *Magnetic Resonance in Medicine*, **2004**, 51, 140-7	4.4	44
184	The clinico-radiological paradox of cognitive function and MRI burden of white matter lesions in people with multiple sclerosis: A systematic review and meta-analysis. *PLoS ONE*, **2017**, 12, e0177727	3.7	44
183	Can musical training influence brain connectivity? Evidence from diffusion tensor MRI. *Brain Sciences*, **2014**, 4, 405-27	3.4	42
182	Incidental findings on brain MR imaging in older community-dwelling subjects are common but serious medical consequences are rare: a cohort study. *PLoS ONE*, **2013**, 8, e71467	3.7	40
181	The relationship of anterior thalamic radiation integrity to psychosis risk associated neuregulin-1 variants. *Molecular Psychiatry*, **2009**, 14, 237-8, 233	15.1	40
180	Early brain temperature elevation and anaerobic metabolism in human acute ischaemic stroke. *Brain*, **2009**, 132, 955-64	11.2	40
179	The effect of network thresholding and weighting on structural brain networks in the UK Biobank. *NeuroImage*, **2020**, 211, 116443	7.9	39
178	Childhood and current cognitive function in healthy 80-year-olds: a DT-MRI study. *NeuroReport*, **2003**, 14, 345-9	1.7	39
177	A brain imaging repository of normal structural MRI across the life course: Brain Images of Normal Subjects (BRAINS). *NeuroImage*, **2017**, 144, 299-304	7.9	38
176	Cerebral Small Vessel Disease Burden Is Increased in Systemic Lupus Erythematosus. *Stroke*, **2016**, 47, 2722-2728	6.7	38
175	On the application of a non-CPMG single-shot fast spin-echo sequence to diffusion tensor MRI of the human brain. *Magnetic Resonance in Medicine*, **2002**, 48, 6-14	4.4	37

174	A genome-wide search for genetic influences and biological pathways related to the brain's white matter integrity. *Neurobiology of Aging*, **2012**, 33, 1847.e1-14	5.6	35
173	Adaptive thresholding for reliable topological inference in single subject fMRI analysis. *Frontiers in Human Neuroscience*, **2012**, 6, 245	3.3	35
172	Genetic variants in the ErbB4 gene are associated with white matter integrity. *Psychiatry Research - Neuroimaging*, **2011**, 191, 133-7	2.9	34
171	A latent measure explains substantial variance in white matter microstructure across the newborn human brain. *Brain Structure and Function*, **2017**, 222, 4023-4033	4	33
170	Reproducibility of tract segmentation between sessions using an unsupervised modelling-based approach. *NeuroImage*, **2009**, 45, 377-85	7.9	33
169	Persistent infarct hyperintensity on diffusion-weighted imaging late after stroke indicates heterogeneous, delayed, infarct evolution. *Stroke*, **2006**, 37, 1418-23	6.7	33
168	The use of diffusion tensor imaging in quantifying the effect of dexamethasone on brain tumours. *NeuroReport*, **1999**, 10, 1385-91	1.7	33
167	Retinal microvasculature and cerebral small vessel disease in the Lothian Birth Cohort 1936 and Mild Stroke Study. *Scientific Reports*, **2019**, 9, 6320	4.9	32
166	Risk and protective factors for structural brain ageing in the eighth decade of life. *Brain Structure and Function*, **2017**, 222, 3477-3490	4	31
165	A test-retest fMRI dataset for motor, language and spatial attention functions. *GigaScience*, **2013**, 2, 6	7.6	31
164	White matter integrity in the splenium of the corpus callosum is related to successful cognitive aging and partly mediates the protective effect of an ancestral polymorphism in ADRB2. *Behavior Genetics*, **2010**, 40, 146-56	3.2	31
163	An epigenetic predictor of death captures multi-modal measures of brain health. *Molecular Psychiatry*, **2021**, 26, 3806-3816	15.1	31
162	Acute ischemic stroke lesion measurement on diffusion-weighted imaging--important considerations in designing acute stroke trials with magnetic resonance imaging. *Journal of Stroke and Cerebrovascular Diseases*, **2007**, 16, 64-70	2.8	30
161	Personality, health, and brain integrity: the Lothian birth cohort study 1936. *Health Psychology*, **2014**, 33, 1477-86	5	29
160	Choline and creatine are not reliable denominators for calculating metabolite ratios in acute ischemic stroke. *Stroke*, **2008**, 39, 2467-9	6.7	29
159	On the use of the FLAIR technique to improve the correction of eddy current induced artefacts in MR diffusion tensor imaging. *Magnetic Resonance Imaging*, **2001**, 19, 937-50	3.3	29
158	Brain cortical characteristics of lifetime cognitive ageing. *Brain Structure and Function*, **2018**, 223, 509-518	4	28
157	Brain white matter tract integrity and cognitive abilities in community-dwelling older people: the Lothian Birth Cohort, 1936. *Neuropsychology*, **2013**, 27, 595-607	3.8	28

156	Cognitive abilities, brain white matter hyperintensity volume, and structural network connectivity in older age. *Human Brain Mapping*, **2018**, 39, 622-632	5.9	28
155	Diffusion tensor MRI tractography reveals increased fractional anisotropy (FA) in arcuate fasciculus following music-cued motor training. *Brain and Cognition*, **2017**, 116, 40-46	2.7	27
154	Kernel regression estimation of fiber orientation mixtures in diffusion MRI. *NeuroImage*, **2016**, 127, 158-172	7.9	27
153	An investigation of a genomewide supported psychosis variant in ZNF804A and white matter integrity in the human brain. *Magnetic Resonance Imaging*, **2012**, 30, 1373-80	3.3	27
152	Associations between diffusion and perfusion parameters, N-acetyl aspartate, and lactate in acute ischemic stroke. *Stroke*, **2009**, 40, 767-72	6.7	27
151	Progression of White Matter Disease and Cortical Thinning Are Not Related in Older Community-Dwelling Subjects. *Stroke*, **2016**, 47, 410-6	6.7	26
150	Reduced structural connectivity within a prefrontal-motor-subcortical network in amyotrophic lateral sclerosis. *Journal of Magnetic Resonance Imaging*, **2015**, 41, 1342-52	5.6	26
149	Theoretical modelling of some spatial and temporal aspects of the mitochondrion/creatine kinase/ myofibril system in muscle. *Molecular and Cellular Biochemistry*, **1998**, 184, 249-289	4.2	26
148	Associations between education and brain structure at age 73 years, adjusted for age 11 IQ. *Neurology*, **2016**, 87, 1820-1826	6.5	26
147	Morphologic, distributional, volumetric, and intensity characterization of periventricular hyperintensities. *American Journal of Neuroradiology*, **2014**, 35, 55-62	4.4	25
146	White matter integrity and its association with affective and interpersonal symptoms in borderline personality disorder. *NeuroImage: Clinical*, **2015**, 7, 476-81	5.3	25
145	Alzheimer's disease susceptibility genes APOE and TOMM40, and hippocampal volumes in the Lothian birth cohort 1936. *PLoS ONE*, **2013**, 8, e80513	3.7	25
144	Parcellation of the Healthy Neonatal Brain into 107 Regions Using Atlas Propagation through Intermediate Time Points in Childhood. *Frontiers in Neuroscience*, **2016**, 10, 220	5.1	25
143	Genes from a translational analysis support a multifactorial nature of white matter hyperintensities. *Stroke*, **2015**, 46, 341-7	6.7	24
142	Resting-State Connectivity and Its Association With Cognitive Performance, Educational Attainment, and Household Income in the UK Biobank. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, **2018**, 3, 878-886	3.4	24
141	Common Genetic Variation Indicates Separate Causes for Periventricular and Deep White Matter Hyperintensities. *Stroke*, **2020**, 51, 2111-2121	6.7	23
140	MR diffusion and perfusion parameters: relationship to metabolites in acute ischaemic stroke. *Journal of Neurology, Neurosurgery and Psychiatry*, **2010**, 81, 185-91	5.5	23
139	Seropositivity for CMV and IL-6 levels are associated with grip strength and muscle size in the elderly. *Immunity and Ageing*, **2013**, 10, 33	9.7	22

138	Improved segmentation reproducibility in group tractography using a quantitative tract similarity measure. *NeuroImage*, **2006**, 33, 482-92	7.9	22
137	Epigenome-wide meta-analysis of blood DNA methylation and its association with subcortical volumes: findings from the ENIGMA Epigenetics Working Group. *Molecular Psychiatry*, **2021**, 26, 3884-3895	15.1	22
136	Polygenic risk score for schizophrenia and structural brain connectivity in older age: A longitudinal connectome and tractography study. *NeuroImage*, **2018**, 183, 884-896	7.9	22
135	Permutation and parametric tests for effect sizes in voxel-based morphometry of gray matter volume in brain structural MRI. *Magnetic Resonance Imaging*, **2015**, 33, 1299-1305	3.3	21
134	DNA methylation and brain structure and function across the life course: A systematic review. *Neuroscience and Biobehavioral Reviews*, **2020**, 113, 133-156	9	21
133	Brain Peak Width of Skeletonized Mean Diffusivity (PSMD) and Cognitive Function in Later Life. *Frontiers in Psychiatry*, **2019**, 10, 524	5	21
132	Quantitative multi-modal MRI of the Hippocampus and cognitive ability in community-dwelling older subjects. *Cortex*, **2014**, 53, 34-44	3.8	21
131	Automatic segmentation of brain white matter and white matter lesions in normal aging: comparison of five multispectral techniques. *Magnetic Resonance Imaging*, **2012**, 30, 222-9	3.3	21
130	Brain white matter integrity and cortisol in older men: the Lothian Birth Cohort 1936. *Neurobiology of Aging*, **2015**, 36, 257-64	5.6	21
129	Brain-wide white matter tract integrity is associated with information processing speed and general intelligence. *Molecular Psychiatry*, **2012**, 17, 955	15.1	21
128	DSC perfusion MRI-Quantification and reduction of systematic errors arising in areas of reduced cerebral blood flow. *Magnetic Resonance in Medicine*, **2006**, 55, 1342-9	4.4	21
127	Identification of the presence of ischaemic stroke lesions by means of texture analysis on brain magnetic resonance images. *Computerized Medical Imaging and Graphics*, **2019**, 74, 12-24	7.6	20
126	Brain iron deposits and lifespan cognitive ability. *Age*, **2015**, 37, 100		20
125	A Comparative evaluation of voxel-based spatial mapping in diffusion tensor imaging. *NeuroImage*, **2017**, 146, 100-112	7.9	20
124	Longitudinal differences in white matter integrity in youth at high familial risk for bipolar disorder. *Bipolar Disorders*, **2017**, 19, 158-167	3.8	19
123	Post-mortem brain analyses of the Lothian Birth Cohort 1936: extending lifetime cognitive and brain phenotyping to the level of the synapse. *Acta Neuropathologica Communications*, **2015**, 3, 53	7.3	19
122	Effects of a Balanced Translocation between Chromosomes 1 and 11 Disrupting the DISC1 Locus on White Matter Integrity. *PLoS ONE*, **2015**, 10, e0130900	3.7	19
121	Widespread associations between trait conscientiousness and thickness of brain cortical regions. *NeuroImage*, **2018**, 176, 22-28	7.9	18

120	Does white matter structure or hippocampal volume mediate associations between cortisol and cognitive ageing?. *Psychoneuroendocrinology*, **2015**, 62, 129-37	5	18
119	Tract shape modelling provides evidence of topological change in corpus callosum genu during normal ageing. *NeuroImage*, **2008**, 43, 20-8	7.9	18
118	Apparent diffusion coefficient (ADC) measurements may be more reliable and reproducible than lesion volume on diffusion-weighted images from patients with acute ischaemic stroke-implications for study design. *Magnetic Resonance Imaging*, **2003**, 21, 617-24	3.3	18
117	A study of the apparent diffusion coefficient of grey and white matter in human ischaemic stroke. *NeuroReport*, **2000**, 11, 2867-74	1.7	18
116	Computational quantification of brain perivascular space morphologies: Associations with vascular risk factors and white matter hyperintensities. A study in the Lothian Birth Cohort 1936. *NeuroImage: Clinical*, **2020**, 25, 102120	5.3	18
115	Spatial Gradient of Microstructural Changes in Normal-Appearing White Matter in Tracts Affected by White Matter Hyperintensities in Older Age. *Frontiers in Neurology*, **2019**, 10, 784	4.1	17
114	Epigenetic signatures of smoking associate with cognitive function, brain structure, and mental and physical health outcomes in the Lothian Birth Cohort 1936. *Translational Psychiatry*, **2019**, 9, 248	8.6	17
113	Early life characteristics and late life burden of cerebral small vessel disease in the Lothian Birth Cohort 1936. *Aging*, **2016**, 8, 2039-2061	5.6	17
112	Neonatal morphometric similarity mapping for predicting brain age and characterizing neuroanatomic variation associated with preterm birth. *NeuroImage: Clinical*, **2020**, 25, 102195	5.3	17
111	Compensation or inhibitory failure? Testing hypotheses of age-related right frontal lobe involvement in verbal memory ability using structural and diffusion MRI. *Cortex*, **2015**, 63, 4-15	3.8	16
110	Information processing speed mediates the relationship between white matter and general intelligence in schizophrenia. *Psychiatry Research - Neuroimaging*, **2016**, 254, 26-33	2.9	16
109	Differentiation of calcified regions and iron deposits in the ageing brain on conventional structural MR images. *Journal of Magnetic Resonance Imaging*, **2014**, 40, 324-33	5.6	16
108	Are APOE e genotype and TOMM40 poly-T repeat length associations with cognitive ageing mediated by brain white matter tract integrity?. *Translational Psychiatry*, **2014**, 4, e449	8.6	16
107	Associations between level and change in physical function and brain volumes. *PLoS ONE*, **2013**, 8, e80386	3.7	16
106	Genetic correlations and genome-wide associations of cortical structure in general population samples of 22,824 adults. *Nature Communications*, **2020**, 11, 4796	17.4	16
105	Genome-wide association study of 23,500 individuals identifies 7 loci associated with brain ventricular volume. *Nature Communications*, **2018**, 9, 3945	17.4	16
104	Interaction of APOE e4 and poor glycemic control predicts white matter hyperintensity growth from 73 to 76. *Neurobiology of Aging*, **2017**, 54, 54-58	5.6	15
103	Coupled changes in hippocampal structure and cognitive ability in later life. *Brain and Behavior*, **2018**, 8, e00838	3.4	15

102	Trait conscientiousness and the personality meta-trait stability are associated with regional white matter microstructure. *Social Cognitive and Affective Neuroscience*, **2016**, 11, 1255-61	4	15
101	Application of the Ordered Logit Model to Optimising Frangi Filter Parameters for Segmentation of Perivascular Spaces. *Procedia Computer Science*, **2016**, 90, 61-67	1.6	15
100	Brain grey and white matter predictors of verbal ability traits in older age: The Lothian Birth Cohort 1936. *NeuroImage*, **2017**, 156, 394-402	7.9	14
99	Tract shape modeling detects changes associated with preterm birth and neuroprotective treatment effects. *NeuroImage: Clinical*, **2015**, 8, 51-8	5.3	14
98	Diffusion tensor imaging correlates of early markers of depression in youth at high-familial risk for bipolar disorder. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, **2018**, 59, 917-927	7.9	14
97	Quantitative tractography and tract shape modeling in amyotrophic lateral sclerosis. *Journal of Magnetic Resonance Imaging*, **2013**, 38, 1140-5	5.6	14
96	Color Fusion of Magnetic Resonance Images Improves Intracranial Volume Measurement in Studies of Aging. *Open Journal of Radiology*, **2012**, 02, 1-9	0.2	14
95	Impact of preterm birth on brain development and long-term outcome: protocol for a cohort study in Scotland. *BMJ Open*, **2020**, 10, e035854	3	14
94	Association between carotid atheroma and cerebral cortex structure at age 73 years. *Annals of Neurology*, **2018**, 84, 576-587	9.4	14
93	Polygenic risk of ischemic stroke is associated with cognitive ability. *Neurology*, **2016**, 86, 611-8	6.5	13
92	Central and non-central networks, cognition, clinical symptoms, and polygenic risk scores in schizophrenia. *Human Brain Mapping*, **2017**, 38, 5919-5930	5.9	13
91	Characterization of multifocal T2*-weighted MRI hypointensities in the basal ganglia of elderly, community-dwelling subjects. *NeuroImage*, **2013**, 82, 470-80	7.9	13
90	Predictors of gait speed and its change over three years in community-dwelling older people. *Aging* , **2018**, 10, 144-153	5.6	13
89	Familial t(1;11) translocation is associated with disruption of white matter structural integrity and oligodendrocyte-myelin dysfunction. *Molecular Psychiatry*, **2019**, 24, 1641-1654	15.1	12
88	Reliability of two techniques for assessing cerebral iron deposits with structural magnetic resonance imaging. *Journal of Magnetic Resonance Imaging*, **2011**, 33, 54-61	5.6	12
87	Birth parameters are associated with late-life white matter integrity in community-dwelling older people. *Stroke*, **2009**, 40, 1225-8	6.7	12
86	Dietary patterns, cognitive function, and structural neuroimaging measures of brain aging. *Experimental Gerontology*, **2020**, 142, 111117	4.5	12
85	Age-Related Changes of Peak Width Skeletonized Mean Diffusivity (PSMD) Across the Adult Lifespan: A Multi-Cohort Study. *Frontiers in Psychiatry*, **2020**, 11, 342	5	11

84	Metric to quantify white matter damage on brain magnetic resonance images. *Neuroradiology*, **2017**, 59, 951-962	3.2	11
83	Cognitive impairment in early onset epilepsy is associated with reduced left thalamic volume. *Epilepsy and Behavior*, **2018**, 80, 266-271	3.2	10
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