Stephen M Smith

List of Publications by Year in Descending Order

280 papers	107,029 citations	105 h-index	314 g-index
314 ext. papers	131,317 ext. citations	8.9 avg, IF	8.53 L-index

#	Paper	IF	Citations
280	Multi-dynamic modelling reveals strongly time-varying resting fMRI correlations.. *Medical Image Analysis*, **2022**, 77, 102366	15.4	2
279	SARS-CoV-2 is associated with changes in brain structure in UK Biobank.. *Nature*, **2022**,	50.4	74
278	Common variants contribute to intrinsic human brain functional networks.. *Nature Genetics*, **2022**, 54, 508-517	36.3	1
277	Deep neural networks learn general and clinically relevant representations of the ageing brain.. *NeuroImage*, **2022**, 256, 119210	7.9	3
276	A structural brain network of genetic vulnerability to psychiatric illness. *Molecular Psychiatry*, **2021**, 26, 2089-2100	15.1	6
275	Individual variations in 'brain age' relate to early-life factors more than to longitudinal brain change. *ELife*, **2021**, 10,	8.9	11
274	Leisure Activities and Their Relationship With MRI Measures of Brain Structure, Functional Connectivity, and Cognition in the UK Biobank Cohort. *Frontiers in Aging Neuroscience*, **2021**, 13, 734866	5.3	1
273	Adapting the UK Biobank Brain Imaging Protocol and Analysis Pipeline for the C-MORE Multi-Organ Study of COVID-19 Survivors. *Frontiers in Neurology*, **2021**, 12, 753284	4.1	2
272	Brain pathology recapitulates physiology: A network meta-analysis. *Communications Biology*, **2021**, 4, 301	6.7	6
271	The Developing Human Connectome Project: typical and disrupted perinatal functional connectivity. *Brain*, **2021**, 144, 2199-2213	11.2	18
270	Phenotyping the Preterm Brain: Characterizing Individual Deviations From Normative Volumetric Development in Two Large Infant Cohorts. *Cerebral Cortex*, **2021**, 31, 3665-3677	5.1	3
269	The nonhuman primate neuroimaging and neuroanatomy project. *NeuroImage*, **2021**, 229, 117726	7.9	21
268	An expanded set of genome-wide association studies of brain imaging phenotypes in UK Biobank. *Nature Neuroscience*, **2021**, 24, 737-745	25.5	27
267	Optimising a Simple Fully Convolutional Network for Accurate Brain Age Prediction in the PAC 2019 Challenge. *Frontiers in Psychiatry*, **2021**, 12, 627996	5	4
266	Dopaminergic organization of striatum is linked to cortical activity and brain expression of genes associated with psychiatric illness. *Science Advances*, **2021**, 7,	14.3	3
265	Brain imaging before and after COVID-19 in UK Biobank **2021**,		31
264	Phenotype discovery from population brain imaging. *Medical Image Analysis*, **2021**, 71, 102050	15.4	5

263	Confound modelling in UK Biobank brain imaging. *NeuroImage*, **2021**, 224, 117002	7.9	40
262	Shared and Anxiety-Specific Pediatric Psychopathology Dimensions Manifest Distributed Neural Correlates. *Biological Psychiatry*, **2021**, 89, 579-587	7.9	1
261	Learning patterns of the ageing brain in MRI using deep convolutional networks. *NeuroImage*, **2021**, 224, 117401	7.9	27
260	Accurate brain age prediction with lightweight deep neural networks. *Medical Image Analysis*, **2021**, 68, 101871	15.4	60
259	Multimodal Imaging Brain Markers in Early Adolescence Are Linked with a Physically Active Lifestyle. *Journal of Neuroscience*, **2021**, 41, 1092-1104	6.6	1
258	Medium-term effects of SARS-CoV-2 infection on multiple vital organs, exercise capacity, cognition, quality of life and mental health, post-hospital discharge. *EClinicalMedicine*, **2021**, 31, 100683	11.3	164
257	Relationships between retinal layer thickness and brain volumes in the UK Biobank cohort. *European Journal of Neurology*, **2021**, 28, 1490-1498	6	5
256	Hierarchical modelling of functional brain networks in population and individuals from big fMRI data. *NeuroImage*, **2021**, 243, 118513	7.9	0
255	The Human Connectome Project: A retrospective. *NeuroImage*, **2021**, 244, 118543	7.9	15
254	Towards HCP-Style macaque connectomes: 24-Channel 3T multi-array coil, MRI sequences and preprocessing. *NeuroImage*, **2020**, 215, 116800	7.9	28
253	Patterns of sociocognitive stratification and perinatal risk in the child brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 12419-12427	11.5	19
252	The UK Biobank imaging enhancement of 100,000 participants: rationale, data collection, management and future directions. *Nature Communications*, **2020**, 11, 2624	17.4	81
251	Common Genetic Variation Indicates Separate Causes for Periventricular and Deep White Matter Hyperintensities. *Stroke*, **2020**, 51, 2111-2121	6.7	23
250	A Symmetric Prior for the Regularisation of Elastic Deformations: Improved anatomical plausibility in nonlinear image registration. *NeuroImage*, **2020**, 219, 116962	7.9	3
249	Permutation inference for canonical correlation analysis. *NeuroImage*, **2020**, 220, 117065	7.9	16
248	Optimising network modelling methods for fMRI. *NeuroImage*, **2020**, 211, 116604	7.9	73
247	Multimodal MRI Template Creation in the Ring-Tailed Lemur and Rhesus Macaque. *Lecture Notes in Computer Science*, **2020**, 141-150	0.9	
246	Discovering correlates of age-related decline in a healthy late-midlife male birth cohort. *Aging*, **2020**, 12, 16709-16743	5.6	0

245	Brain aging comprises many modes of structural and functional change with distinct genetic and biophysical associations. *ELife*, **2020**, 9,	8.9	56
244	Denoising scanner effects from multimodal MRI data using linked independent component analysis. *NeuroImage*, **2020**, 208, 116388	7.9	16
243	The developing Human Connectome Project (dHCP) automated resting-state functional processing framework for newborn infants. *NeuroImage*, **2020**, 223, 117303	7.9	28
242	Modelling subject variability in the spatial and temporal characteristics of functional modes. *NeuroImage*, **2020**, 222, 117226	7.9	15
241	Challenges and future directions for representations of functional brain organization. *Nature Neuroscience*, **2020**, 23, 1484-1495	25.5	35
240	A data-driven approach to optimising the encoding for multi-shell diffusion MRI with application to neonatal imaging. *NMR in Biomedicine*, **2020**, 33, e4348	4.4	8
239	Cerebrovascular risk factors impact frontoparietal network integrity and executive function in healthy ageing. *Nature Communications*, **2020**, 11, 4340	17.4	22
238	Handedness, language areas and neuropsychiatric diseases: insights from brain imaging and genetics. *Brain*, **2019**, 142, 2938-2947	11.2	67
237	Estimation of brain age delta from brain imaging. *NeuroImage*, **2019**, 200, 528-539	7.9	118
236	Structural Variability in the Human Brain Reflects Fine-Grained Functional Architecture at the Population Level. *Journal of Neuroscience*, **2019**, 39, 6136-6149	6.6	18
235	Effective degrees of freedom of the Pearson's correlation coefficient under autocorrelation. *NeuroImage*, **2019**, 199, 609-625	7.9	49
234	Classification of temporal ICA components for separating global noise from fMRI data: Reply to Power. *NeuroImage*, **2019**, 197, 435-438	7.9	26
233	The spatial correspondence and genetic influence of interhemispheric connectivity with white matter microstructure. *Nature Neuroscience*, **2019**, 22, 809-819	25.5	31
232	Automated processing pipeline for neonatal diffusion MRI in the developing Human Connectome Project. *NeuroImage*, **2019**, 185, 750-763	7.9	59
231	Towards Algorithmic Analytics for Large-scale Datasets. *Nature Machine Intelligence*, **2019**, 1, 296-306	22.5	34
230	Hippocampal volume across age: Nomograms derived from over 19,700 people in UK Biobank. *NeuroImage: Clinical*, **2019**, 23, 101904	5.3	64
229	Discovering markers of healthy aging: a prospective study in a Danish male birth cohort. *Aging*, **2019**, 11, 5943-5974	5.6	5
228	The relationship between spatial configuration and functional connectivity of brain regions revisited. *ELife*, **2019**, 8,	8.9	34

227	Optimising neonatal fMRI data analysis: Design and validation of an extended dHCP preprocessing pipeline to characterise noxious-evoked brain activity in infants. *NeuroImage*, **2019**, 186, 286-300	7.9	17
226	The Lifespan Human Connectome Project in Aging: An overview. *NeuroImage*, **2019**, 185, 335-348	7.9	74
225	Using GPUs to accelerate computational diffusion MRI: From microstructure estimation to tractography and connectomes. *NeuroImage*, **2019**, 188, 598-615	7.9	48
224	Spatial parcellations, spectral filtering, and connectivity measures in fMRI: Optimizing for discrimination. *Human Brain Mapping*, **2019**, 40, 407-419	5.9	17
223	Probabilistic TFCE: A generalized combination of cluster size and voxel intensity to increase statistical power. *NeuroImage*, **2019**, 185, 12-26	7.9	33
222	Disambiguating brain functional connectivity. *NeuroImage*, **2018**, 173, 540-550	7.9	38
221	Directed functional connectivity using dynamic graphical models. *NeuroImage*, **2018**, 175, 340-353	7.9	17
220	The developing human connectome project: A minimal processing pipeline for neonatal cortical surface reconstruction. *NeuroImage*, **2018**, 173, 88-112	7.9	158
219	Statistical Challenges in "Big Data" Human Neuroimaging. *Neuron*, **2018**, 97, 263-268	13.9	174
218	Discovering dynamic brain networks from big data in rest and task. *NeuroImage*, **2018**, 180, 646-656	7.9	137
217	Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. *NeuroImage*, **2018**, 166, 400-424	7.9	415
216	Using temporal ICA to selectively remove global noise while preserving global signal in functional MRI data. *NeuroImage*, **2018**, 181, 692-717	7.9	155
215	Multi-subject hierarchical inverse covariance modelling improves estimation of functional brain networks. *NeuroImage*, **2018**, 178, 370-384	7.9	12
214	The Lifespan Human Connectome Project in Development: A large-scale study of brain connectivity development in 5-21 year olds. *NeuroImage*, **2018**, 183, 456-468	7.9	71
213	Stratification of MDD and GAD patients by resting state brain connectivity predicts cognitive bias. *NeuroImage: Clinical*, **2018**, 19, 425-433	5.3	16
212	Construction of a neonatal cortical surface atlas using Multimodal Surface Matching in the Developing Human Connectome Project. *NeuroImage*, **2018**, 179, 11-29	7.9	45
211	Author response: The relationship between spatial configuration and functional connectivity of brain regions **2018**,		12
210	The Developing Human Connectome Project: a Minimal Processing Pipeline for Neonatal Cortical Surface Reconstruction **2018**, 173, 88-112		88

209	Multimodal surface matching with higher-order smoothness constraints. *NeuroImage*, **2018**, 167, 453-465	7.9	124
208	Extending the Human Connectome Project across ages: Imaging protocols for the Lifespan Development and Aging projects. *NeuroImage*, **2018**, 183, 972-984	7.9	101
207	Genome-wide association studies of brain imaging phenotypes in UK Biobank. *Nature*, **2018**, 562, 210-216	50.4	282
206	A Machine Learning Approach to Diffusion MRI Partial Volume Estimation. *Lecture Notes in Computer Science*, **2018**, 42-51	0.9	
205	The relationship between spatial configuration and functional connectivity of brain regions. *ELife*, **2018**, 7,	8.9	105
204	Heterogeneous fractionation profiles of meta-analytic coactivation networks. *NeuroImage*, **2017**, 149, 424-435	7.9	6
203	Studying neuroanatomy using MRI. *Nature Neuroscience*, **2017**, 20, 314-326	25.5	147
202	Tradeoffs in pushing the spatial resolution of fMRI for the 7T Human Connectome Project. *NeuroImage*, **2017**, 154, 23-32	7.9	68
201	Hand classification of fMRI ICA noise components. *NeuroImage*, **2017**, 154, 188-205	7.9	249
200	Brain network dynamics are hierarchically organized in time. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12827-12832	11.5	311
199	Distinct resting-state functional connections associated with episodic and visuospatial memory in older adults. *NeuroImage*, **2017**, 159, 122-130	7.9	12
198	Investigations into within- and between-subject resting-state amplitude variations. *NeuroImage*, **2017**, 159, 57-69	7.9	51
197	Using Dual Regression to Investigate Network Shape and Amplitude in Functional Connectivity Analyses. *Frontiers in Neuroscience*, **2017**, 11, 115	5.1	183
196	The heritability of multi-modal connectivity in human brain activity. *ELife*, **2017**, 6,	8.9	62
195	The Human Connectome Project's neuroimaging approach. *Nature Neuroscience*, **2016**, 19, 1175-87	25.5	482
194	Multimodal population brain imaging in the UK Biobank prospective epidemiological study. *Nature Neuroscience*, **2016**, 19, 1523-1536	25.5	739
193	A multi-modal parcellation of human cerebral cortex. *Nature*, **2016**, 536, 171-178	50.4	2046
192	Faster permutation inference in brain imaging. *NeuroImage*, **2016**, 141, 502-516	7.9	136

191	Linking cognition to brain connectivity. *Nature Neuroscience*, **2016**, 19, 7-9	25.5	33
190	The brain functional connectome is robustly altered by lack of sleep. *NeuroImage*, **2016**, 127, 324-332	7.9	81
189	Statistical Analysis of fMRI Data. *Neuromethods*, **2016**, 183-239	0.4	1
188	Non-parametric combination and related permutation tests for neuroimaging. *Human Brain Mapping*, **2016**, 37, 1486-511	5.9	122
187	Accelerating functional MRI using fixed-rank approximations and radial-cartesian sampling. *Magnetic Resonance in Medicine*, **2016**, 76, 1825-1836	4.4	22
186	Functional Connectivity under Anticipation of Shock: Correlates of Trait Anxious Affect versus Induced Anxiety. *Journal of Cognitive Neuroscience*, **2015**, 27, 1840-53	3.1	17
185	Brain atrophy in cognitively impaired elderly: the importance of long-chain ⊟3 fatty acids and B vitamin status in a randomized controlled trial. *American Journal of Clinical Nutrition*, **2015**, 102, 215-21	7	115
184	Disintegration of Sensorimotor Brain Networks in Schizophrenia. *Schizophrenia Bulletin*, **2015**, 41, 1326-35	3.3	99
183	Learning to identify CNS drug action and efficacy using multistudy fMRI data. *Science Translational Medicine*, **2015**, 7, 274ra16	17.5	71
182	A positive-negative mode of population covariation links brain connectivity, demographics and behavior. *Nature Neuroscience*, **2015**, 18, 1565-7	25.5	551
181	Resting-State Networks. *Biological Magnetic Resonance*, **2015**, 387-425	0.5	0
180	Multi-level block permutation. *NeuroImage*, **2015**, 123, 253-68	7.9	137
179	k-t FASTER: Acceleration of functional MRI data acquisition using low rank constraints. *Magnetic Resonance in Medicine*, **2015**, 74, 353-64	4.4	49
178	Effective artifact removal in resting state fMRI data improves detection of DMN functional connectivity alteration in Alzheimer's disease. *Frontiers in Human Neuroscience*, **2015**, 9, 449	3.3	35
177	ICA-based artifact removal diminishes scan site differences in multi-center resting-state fMRI. *Frontiers in Neuroscience*, **2015**, 9, 395	5.1	37
176	Large-scale probabilistic functional modes from resting state fMRI. *NeuroImage*, **2015**, 109, 217-31	7.9	67
175	Attentional load modulates large-scale functional brain connectivity beyond the core attention networks. *NeuroImage*, **2015**, 109, 260-72	7.9	30
174	Automatic denoising of functional MRI data: combining independent component analysis and hierarchical fusion of classifiers. *NeuroImage*, **2014**, 90, 449-68	7.9	995

173	Resting state correlates of subdimensions of anxious affect. *Journal of Cognitive Neuroscience*, **2014**, 26, 914-26	3.1	30
172	ICA-based artefact removal and accelerated fMRI acquisition for improved resting state network imaging. *NeuroImage*, **2014**, 95, 232-47	7.9	708
171	Group-PCA for very large fMRI datasets. *NeuroImage*, **2014**, 101, 738-49	7.9	157
170	Study protocol: The Whitehall II imaging sub-study. *BMC Psychiatry*, **2014**, 14, 159	4.2	58
169	Permutation inference for the general linear model. *NeuroImage*, **2014**, 92, 381-97	7.9	1884
168	Optimizing full-brain coverage in human brain MRI through population distributions of brain size. *NeuroImage*, **2014**, 98, 513-20	7.9	23
167	MSM: a new flexible framework for Multimodal Surface Matching. *NeuroImage*, **2014**, 100, 414-26	7.9	347
166	Fast transient networks in spontaneous human brain activity. *ELife*, **2014**, 3, e01867	8.9	295
165	MVPA to enhance the study of rare cognitive events: An investigation of experimental PTSD **2014**,		2
164	Cross-Subject Comparison of Local Diffusion MRI Parameters **2014**, 209-239		2
163	Increased resting state functional connectivity in the default mode network in recovered anorexia nervosa. *Human Brain Mapping*, **2014**, 35, 483-91	5.9	82
162	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, 17648-53	11.5	173
161	First steps in using machine learning on fMRI data to predict intrusive memories of traumatic film footage. *Behaviour Research and Therapy*, **2014**, 62, 37-46	5.2	22
160	Local GABA concentration is related to network-level resting functional connectivity. *ELife*, **2014**, 3, e01465	8.9	120
159	Spatially constrained hierarchical parcellation of the brain with resting-state fMRI. *NeuroImage*, **2013**, 76, 313-24	7.9	158
158	Functional connectomics from resting-state fMRI. *Trends in Cognitive Sciences*, **2013**, 17, 666-82	14	560
157	The WU-Minn Human Connectome Project: an overview. *NeuroImage*, **2013**, 80, 62-79	7.9	2585
156	Function in the human connectome: task-fMRI and individual differences in behavior. *NeuroImage*, **2013**, 80, 169-89	7.9	779

155	Utility of Partial Correlation for Characterising Brain Dynamics: MVPA-based Assessment of Regularisation and Network Selection **2013**,		2
154	Preventing Alzheimer's disease-related gray matter atrophy by B-vitamin treatment. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 9523-8	11.5	329
153	What is the most interesting part of the brain?. *Trends in Cognitive Sciences*, **2013**, 17, 2-4	14	31
152	Improving alignment in Tract-based spatial statistics: evaluation and optimization of image registration. *NeuroImage*, **2013**, 76, 400-11	7.9	120
151	Evaluation of slice accelerations using multiband echo planar imaging at 3 T. *NeuroImage*, **2013**, 83, 991-1001	7.9	306
150	Resting functional connectivity reveals residual functional activity in Alzheimer's disease. *Biological Psychiatry*, **2013**, 74, 375-83	7.9	51
149	Brain microstructure reveals early abnormalities more than two years prior to clinical progression from mild cognitive impairment to Alzheimer's disease. *Journal of Neuroscience*, **2013**, 33, 2147-55	6.6	131
148	Resting-state fMRI in the Human Connectome Project. *NeuroImage*, **2013**, 80, 144-68	7.9	865
147	Pushing spatial and temporal resolution for functional and diffusion MRI in the Human Connectome Project. *NeuroImage*, **2013**, 80, 80-104	7.9	534
146	Spatial vs. Temporal Features in ICA of Resting-State fMRI - A Quantitative and Qualitative Investigation in the Context of Response Inhibition. *PLoS ONE*, **2013**, 8, e66572	3.7	22
145	ICA model order selection of task co-activation networks. *Frontiers in Neuroscience*, **2013**, 7, 237	5.1	95
144	Pairwise Likelihood Ratios for Estimation of Non-Gaussian Structural Equation Models. *Journal of Machine Learning Research*, **2013**, 14, 111-152	28.6	63
143	Multimodal surface matching: fast and generalisable cortical registration using discrete optimisation. *Lecture Notes in Computer Science*, **2013**, 23, 475-86	0.9	31
142	Spontaneous blood oxygenation level-dependent fMRI signal is modulated by behavioral state and correlates with evoked response in sensorimotor cortex: a 7.0-T fMRI study. *Human Brain Mapping*, **2012**, 33, 511-22	5.9	18
141	Temporally-independent functional modes of spontaneous brain activity. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 3131-6	11.5	555
140	An anatomically comprehensive atlas of the adult human brain transcriptome. *Nature*, **2012**, 489, 391-399	30.4	1525
139	FSL. *NeuroImage*, **2012**, 62, 782-90	7.9	5752
138	Task-driven ICA feature generation for accurate and interpretable prediction using fMRI. *NeuroImage*, **2012**, 60, 189-203	7.9	26

137	The future of FMRI connectivity. *NeuroImage*, **2012**, 62, 1257-66	7.9	254
136	Benefits of multi-modal fusion analysis on a large-scale dataset: life-span patterns of inter-subject variability in cortical morphometry and white matter microstructure. *NeuroImage*, **2012**, 63, 365-80	7.9	96
135	Tools of the trade: psychophysiological interactions and functional connectivity. *Social Cognitive and Affective Neuroscience*, **2012**, 7, 604-9	4	529
134	Language networks in anophthalmia: maintained hierarchy of processing in 'visual' cortex. *Brain*, **2012**, 135, 1566-77	11.2	74
133	Resting-state FMRI single subject cortical parcellation based on region growing. *Lecture Notes in Computer Science*, **2012**, 15, 188-95	0.9	12
132	A Bayesian model of shape and appearance for subcortical brain segmentation. *NeuroImage*, **2011**, 56, 907-22	7.9	1531
131	Diffusion imaging of whole, post-mortem human brains on a clinical MRI scanner. *NeuroImage*, **2011** , 57, 167-181	7.9	193
130	Network modelling methods for FMRI. *NeuroImage*, **2011**, 54, 875-91	7.9	1254
129	Adjusting the effect of nonstationarity in cluster-based and TFCE inference. *NeuroImage*, **2011**, 54, 2006-19	7.9	105
128	DTI measures in crossing-fibre areas: increased diffusion anisotropy reveals early white matter alteration in MCI and mild Alzheimer's disease. *NeuroImage*, **2011**, 55, 880-90	7.9	381
127	Spectral characteristics of resting state networks. *Progress in Brain Research*, **2011**, 193, 259-76	2.9	140
126	Using Gaussian-process regression for meta-analytic neuroimaging inference based on sparse observations. *IEEE Transactions on Medical Imaging*, **2011**, 30, 1401-16	11.7	18
125	Investigating the electrophysiological basis of resting state networks using magnetoencephalography. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 16783-8	11.5	647
124	Behavioral interpretations of intrinsic connectivity networks. *Journal of Cognitive Neuroscience*, **2011**, 23, 4022-37	3.1	769
123	Multiplexed echo planar imaging for sub-second whole brain FMRI and fast diffusion imaging. *PLoS ONE*, **2010**, 5, e15710	3.7	889
122	Advances and pitfalls in the analysis and interpretation of resting-state FMRI data. *Frontiers in Systems Neuroscience*, **2010**, 4, 8	3.5	624
121	Resting state networks change in clinically isolated syndrome. *Brain*, **2010**, 133, 1612-21	11.2	194
120	Age-related changes in grey and white matter structure throughout adulthood. *NeuroImage*, **2010**, 51, 943-51	7.9	336

119	Crossing fibres in tract-based spatial statistics. *NeuroImage*, **2010**, 49, 249-56	7.9	145
118	Combining shape and connectivity analysis: an MRI study of thalamic degeneration in Alzheimer's disease. *NeuroImage*, **2010**, 49, 1-8	7.9	138
117	Relationships of brain white matter microstructure with clinical and MR measures in relapsing-remitting multiple sclerosis. *Journal of Magnetic Resonance Imaging*, **2010**, 31, 309-16	5.6	63
116	Asymmetries of the balanced SSFP profile. Part II: white matter. *Magnetic Resonance in Medicine*, **2010**, 63, 396-406	4.4	23
115	Homocysteine-lowering by B vitamins slows the rate of accelerated brain atrophy in mild cognitive impairment: a randomized controlled trial. *PLoS ONE*, **2010**, 5, e12244	3.7	472
114	Schizophrenia delays and alters maturation of the brain in adolescence. *Brain*, **2009**, 132, 2437-48	11.2	114
113	Model-free group analysis shows altered BOLD FMRI networks in dementia. *Human Brain Mapping*, **2009**, 30, 256-66	5.9	107
112	Investigation of white matter pathology in ALS and PLS using tract-based spatial statistics. *Human Brain Mapping*, **2009**, 30, 615-24	5.9	107
111	White matter tract integrity in aging and Alzheimer's disease. *Human Brain Mapping*, **2009**, 30, 1051-9	5.9	194
110	Cross-subject Comparison of Local Diffusion MRI Parameters **2009**, 147-174		1
109	Correspondence of the brain's functional architecture during activation and rest. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 13040-5	11.5	3661
108	Distinct patterns of brain activity in young carriers of the APOE-epsilon4 allele. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 7209-14	11.5	1286
107	Threshold-free cluster enhancement: addressing problems of smoothing, threshold dependence and localisation in cluster inference. *NeuroImage*, **2009**, 44, 83-98	7.9	3377
106	Meta-analysis of neuroimaging data: a comparison of image-based and coordinate-based pooling of studies. *NeuroImage*, **2009**, 45, 810-23	7.9	250
105	An evaluation of four automatic methods of segmenting the subcortical structures in the brain. *NeuroImage*, **2009**, 47, 1435-47	7.9	148
104	Sampling and visualizing creases with scale-space particles. *IEEE Transactions on Visualization and Computer Graphics*, **2009**, 15, 1415-24	4	55
103	Bayesian analysis of neuroimaging data in FSL. *NeuroImage*, **2009**, 45, S173-86	7.9	1553
102	Statistical Analysis of fMRI Data. *Neuromethods*, **2009**, 179-236	0.4	8

101	Methods for tractography-driven surface registration of brain structures. *Lecture Notes in Computer Science*, **2009**, 12, 705-12	0.9	4
100	Adjusting the neuroimaging statistical inferences for nonstationarity. *Lecture Notes in Computer Science*, **2009**, 12, 992-9	0.9	4
99	Enhanced brain extraction improves the accuracy of brain atrophy estimation. *NeuroImage*, **2008**, 40, 583-589	7.9	52
98	Bayesian deconvolution of [corrected] fMRI data using bilinear dynamical systems. *NeuroImage*, **2008**, 42, 1381-96	7.9	27
97	Evidence for abnormalities of cortical development in adolescent-onset schizophrenia. *NeuroImage*, **2008**, 43, 665-75	7.9	117
96	Brain atrophy assessment in multiple sclerosis: importance and limitations. *Neuroimaging Clinics of North America*, **2008**, 18, 675-86, xi	3	57
95	Structural and functional abnormalities of the motor system in developmental stuttering. *Brain*, **2008**, 131, 50-9	11.2	271
94	Comparison and evaluation of segmentation techniques for subcortical structures in brain MRI. *Lecture Notes in Computer Science*, **2008**, 11, 409-16	0.9	28
93	Anatomically related grey and white matter abnormalities in adolescent-onset schizophrenia. *Brain*, **2007**, 130, 2375-86	11.2	605
92	Triangulating a cognitive control network using diffusion-weighted magnetic resonance imaging (MRI) and functional MRI. *Journal of Neuroscience*, **2007**, 27, 3743-52	6.6	738
91	Intercenter agreement of brain atrophy measurement in multiple sclerosis patients using manually-edited SIENA and SIENAX. *Journal of Magnetic Resonance Imaging*, **2007**, 26, 881-5	5.6	39
90	Acquisition and voxelwise analysis of multi-subject diffusion data with tract-based spatial statistics. *Nature Protocols*, **2007**, 2, 499-503	18.8	472
89	Measuring brain atrophy in multiple sclerosis. *Journal of Neuroimaging*, **2007**, 17 Suppl 1, 10S-15S	2.8	45
88	Manifestations of early brain recovery associated with abstinence from alcoholism. *Brain*, **2007**, 130, 36-47	11.2	146
87	Meaningful design and contrast estimability in FMRI. *NeuroImage*, **2007**, 34, 127-36	7.9	50
86	Integrity of white matter in the corpus callosum correlates with bimanual co-ordination skills. *NeuroImage*, **2007**, 36 Suppl 2, T16-21	7.9	187
85	Longitudinal and cross-sectional analysis of atrophy in Alzheimer's disease: cross-validation of BSI, SIENA and SIENAX. *NeuroImage*, **2007**, 36, 1200-6	7.9	93
84	Signal and noise characteristics of SSFP FMRI: a comparison with GRE at multiple field strengths. *NeuroImage*, **2007**, 37, 1227-36	7.9	38

83	Regional brain atrophy development is related to specific aspects of clinical dysfunction in multiple sclerosis. *NeuroImage*, **2007**, 38, 529-37	7.9	34
82	Independent Component Analysis of Functional Magnetic Resonance Imaging Data Using Wavelet Dictionaries **2007**, 625-632		1
81	Applying FSL to the FIAC data: model-based and model-free analysis of voice and sentence repetition priming. *Human Brain Mapping*, **2006**, 27, 380-91	5.9	51
80	High-resolution FMRI at 1.5T using balanced SSFP. *Magnetic Resonance in Medicine*, **2006**, 55, 161-70	4.4	61
79	Tract-based spatial statistics: voxelwise analysis of multi-subject diffusion data. *NeuroImage*, **2006**, 31, 1487-505	7.9	4763
78	Functional anatomy of interhemispheric cortical connections in the human brain. *Journal of Anatomy*, **2006**, 209, 311-20	2.9	169
77	Lesion probability maps of white matter hyperintensities in elderly individuals: results of the Austrian stroke prevention study. *Journal of Neurology*, **2006**, 253, 1064-70	5.5	60
76	A Bayesian Cost Function Applied to Model-Based Registration of Sub-cortical Brain Structures. *Lecture Notes in Computer Science*, **2006**, 9-17	0.9	1
75	Investigations into resting-state connectivity using independent component analysis. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2005**, 360, 1001-13	5.8	2523
74	Mixture models with adaptive spatial regularization for segmentation with an application to FMRI data. *IEEE Transactions on Medical Imaging*, **2005**, 24, 1-11	11.7	99
73	Ventral striatum/nucleus accumbens activation to smoking-related pictorial cues in smokers and nonsmokers: a functional magnetic resonance imaging study. *Biological Psychiatry*, **2005**, 58, 488-94	7.9	226
72	Prioritizing new over old: an fMRI study of the preview search task. *Human Brain Mapping*, **2005**, 24, 69-78	5.9	24
71	Variability in fMRI: a re-examination of inter-session differences. *Human Brain Mapping*, **2005**, 24, 248-57	5.9	140
70	White matter lesion progression, brain atrophy, and cognitive decline: the Austrian stroke prevention study. *Annals of Neurology*, **2005**, 58, 610-6	9.4	284
69	Blood oxygenation level dependent contrast resting state networks are relevant to functional activity in the neocortical sensorimotor system. *Experimental Brain Research*, **2005**, 167, 587-94	2.3	140
68	Functional-anatomical validation and individual variation of diffusion tractography-based segmentation of the human thalamus. *Cerebral Cortex*, **2005**, 15, 31-9	5.1	459
67	A comparison of the tissue classification and the segmentation propagation techniques in MRI brain image segmentation **2005**,		2
66	Accelerated evolution of brain atrophy and "black holes" in MS patients with APOE-epsilon 4. *Annals of Neurology*, **2004**, 55, 563-9	9.4	100

65	Distinct portions of anterior cingulate cortex and medial prefrontal cortex are activated by reward processing in separable phases of decision-making cognition. *Biological Psychiatry*, **2004**, 55, 594-602	7.9	324
64	Fully Bayesian spatio-temporal modeling of FMRI data. *IEEE Transactions on Medical Imaging*, **2004**, 23, 213-31	11.7	181
63	Probabilistic independent component analysis for functional magnetic resonance imaging. *IEEE Transactions on Medical Imaging*, **2004**, 23, 137-52	11.7	1879
62	Multilevel linear modelling for FMRI group analysis using Bayesian inference. *NeuroImage*, **2004**, 21, 1732-47	7.9	1171
61	Constrained linear basis sets for HRF modelling using Variational Bayes. *NeuroImage*, **2004**, 21, 1748-61	7.9	192
60	Advances in functional and structural MR image analysis and implementation as FSL. *NeuroImage*, **2004**, 23 Suppl 1, S208-19	7.9	8876
59	Interferon beta-1a for brain tissue loss in patients at presentation with syndromes suggestive of multiple sclerosis: a randomised, double-blind, placebo-controlled trial. *Lancet, The*, **2004**, 364, 1489-96	40	215
58	A Framework for Detailed Objective Comparison of Non-rigid Registration Algorithms in Neuroimaging. *Lecture Notes in Computer Science*, **2004**, 679-686	0.9	19
57	Potentially adaptive functional changes in cognitive processing for patients with multiple sclerosis and their acute modulation by rivastigmine. *Brain*, **2003**, 126, 2750-60	11.2	141
56	On bias in the estimation of autocorrelations for fMRI voxel time-series analysis. *NeuroImage*, **2003**, 18, 83-90	7.9	28
55	General multilevel linear modeling for group analysis in FMRI. *NeuroImage*, **2003**, 20, 1052-63	7.9	1127
54	Evidence for asymmetric frontal-lobe involvement in episodic memory from functional magnetic resonance imaging and patients with unilateral frontal-lobe excisions. *Neuropsychologia*, **2002**, 40, 2420-37	3.2	11
53	Fast robust automated brain extraction. *Human Brain Mapping*, **2002**, 17, 143-55	5.9	7438
52	A method for determining venous contribution to BOLD contrast sensory activation. *Magnetic Resonance Imaging*, **2002**, 20, 695-706	3.3	28
51	Monitoring disease activity and progression in primary progressive multiple sclerosis using MRI: sub-voxel registration to identify lesion changes and to detect cerebral atrophy. *Journal of Neurology*, **2002**, 249, 171-7	5.5	22
50	Imaging how attention modulates pain in humans using functional MRI. *Brain*, **2002**, 125, 310-9	11.2	647
49	Diffuse axonal and tissue injury in patients with multiple sclerosis with low cerebral lesion load and no disability. *Archives of Neurology*, **2002**, 59, 1565-71		150
48	Cerebellar responses during anticipation of noxious stimuli in subjects recovered from depression. Functional magnetic resonance imaging study. *British Journal of Psychiatry*, **2002**, 181, 411-5	5.4	48

47	Imaging attentional modulation of pain in the periaqueductal gray in humans. *Journal of Neuroscience*, **2002**, 22, 2748-52	6.6	450
46	Correlation between motor improvements and altered fMRI activity after rehabilitative therapy. *Brain*, **2002**, 125, 2731-42	11.2	456
45	Accurate, robust, and automated longitudinal and cross-sectional brain change analysis. *NeuroImage*, **2002**, 17, 479-89	7.9	1571
44	Improved Optimization for the Robust and Accurate Linear Registration and Motion Correction of Brain Images. *NeuroImage*, **2002**, 17, 825-841	7.9	6869
43	Effects of word form on brain processing of written Chinese. *NeuroImage*, **2002**, 17, 1538-48	7.9	97
42	Improved optimization for the robust and accurate linear registration and motion correction of brain images. *NeuroImage*, **2002**, 17, 825-41	7.9	4786
41	Normalized accurate measurement of longitudinal brain change. *Journal of Computer Assisted Tomography*, **2001**, 25, 466-75	2.2	377
40	A global optimisation method for robust affine registration of brain images. *Medical Image Analysis*, **2001**, 5, 143-56	15.4	4744
39	Investigating the intrinsic dimensionality of FMRI data for ICA. *NeuroImage*, **2001**, 13, 76	7.9	21
38	Temporal autocorrelation in univariate linear modeling of FMRI data. *NeuroImage*, **2001**, 14, 1370-86	7.9	1941
37	Overview of fMRI analysis **2001**, 216-230		2
36	Preparing fMRI data for statistical analysis **2001**, 231-243		5
35	Quantitative pathological evidence for axonal loss in normal appearing white matter in multiple sclerosis. *Annals of Neurology*, **2000**, 47, 391-395	9.4	364
34	Accurate Robust Symmetry Estimation. *Lecture Notes in Computer Science*, **1999**, 308-317	0.9	17
33	SUSAN—A New Approach to Low Level Image Processing **1997**, 23, 45-78		1811
32	Using GPUs to accelerate computational diffusion MRI: From microstructure estimation to tractography and connectomes		1
31	Image Processing and Quality Control for the first 10,000 Brain Imaging Datasets from UK Biobank		6
30	Genome-wide association studies of brain structure and function in the UK Biobank		9

29	Using Temporal ICA to Selectively Remove Global Noise While Preserving Global Signal in Functional MRI Data	9
28	Accurate brain age prediction with lightweight deep neural networks	8
27	The Developing Human Connectome Project: typical and disrupted perinatal functional connectivity	8
26	Phenotype Discovery from Population Brain Imaging	2
25	Confound modelling in UK Biobank brain imaging	4
24	Mid-life and late life activities and their relationship with MRI measures of brain structure and functional connectivity in the UK Biobank cohort	1
23	Enhanced Brain Imaging Genetics in UK Biobank	7
22	Common variants contribute to intrinsic human brain functional networks	2
21	Combining Multi-Site/Multi-Study MRI Data: Linked-ICA Denoising for Removing Scanner and Site Variability from Multimodal MRI Data	1
20	Effective Degrees of Freedom of the Pearson Correlation Coefficient under Autocorrelation	3
19	Modelling Subject Variability in the Spatial and Temporal Characteristics of Functional Modes	3
18	Estimation of Brain Age Delta from Brain Imaging	6
17	Hippocampal volume across age: Nomograms derived from over 19,700 people in UK Biobank	1
16	Towards HCP-Style Macaque Connectomes: 24-Channel 3T Multi-Array Coil, MRI Sequences and Preprocessing	2
15	High resolution nonlinear registration with simultaneous modelling of intensities	3
14	A data-driven approach to optimising the encoding for multi-shell diffusion MRI with application to neonatal imaging	1
13	Optimising network modelling methods for fMRI	2
12	The developing Human Connectome Project (dHCP) automated resting-state functional processing framework for newborn infants	5

List of Publications

11	Brain aging comprises many modes of structural and functional change with distinct genetic and biophysical associations	3
10	Patterns of socio-cognitive stratification and perinatal risk in the child brain	1
9	Disambiguating brain functional connectivity	2
8	Multimodal Surface Matching with Higher-Order Smoothness Constraints?	1
7	Multi-dynamic Modelling Reveals Strongly Time-varying Resting fMRI Correlations	1
6	Phenotypic and genetic associations of quantitative magnetic susceptibility in UK Biobank brain imaging	1
5	The Forget-Me-Not dHCP study: 7 Tesla high resolution diffusion imaging in the unfixed post-mortem neonatal brain	2
4	Hierarchical modelling of functional brain networks in population and individuals from big fMRI data	1
3	Accurate predictions of individual differences in task-evoked brain activity from resting-state fMRI using a sparse ensemble learner	1
2	Supervised Phenotype Discovery fromMultimodal Brain Imaging	1
1	Graded Variation In Cortical T1w/T2w Myelination During Adolescence	1