## Stamatios N Sotiropoulos

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

81 10,336 39 96 g-index

96 15,112 7.7 6.61 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
81	Long-Term Connectome Analysis Reveals Reshaping of Visual, Spatial Networks in a Model With Vascular Dementia Features <i>Stroke</i> , <b>2022</b> , STROKEAHA121036997	6.7	
80	Right fronto-parietal networks mediate the neurocognitive benefits of enriched environments Brain Communications, <b>2022</b> , 4, fcac080	4.5	
79	The association between inadequate sleep and accelerated brain ageing <i>Neurobiology of Aging</i> , <b>2022</b> , 114, 1-14	5.6	O
78	Uncertainty modelling in deep learning for safer neuroimage enhancement: Demonstration in diffusion MRI. <i>NeuroImage</i> , <b>2021</b> , 225, 117366	7.9	21
77	Quantum computing at the frontiers of biological sciences. <i>Nature Methods</i> , <b>2021</b> , 18, 701-709	21.6	14
76	Modelling white matter in gyral blades as a continuous vector field. NeuroImage, 2021, 227, 117693	7.9	8
75	The Human Connectome Project: A retrospective. <i>NeuroImage</i> , <b>2021</b> , 244, 118543	7.9	15
74	Non-negative data-driven mapping of structural connections with application to the neonatal brain. <i>NeuroImage</i> , <b>2020</b> , 222, 117273	7.9	7
73	Towards HCP-Style macaque connectomes: 24-Channel 3T multi-array coil, MRI sequences and preprocessing. <i>NeuroImage</i> , <b>2020</b> , 215, 116800	7.9	28
72	XTRACT - Standardised protocols for automated tractography in the human and macaque brain. <i>NeuroImage</i> , <b>2020</b> , 217, 116923	7.9	56
71	The role of node dynamics in shaping emergent functional connectivity patterns in the brain. <i>Network Neuroscience</i> , <b>2020</b> , 4, 467-483	5.6	6
70	Improved fibre dispersion estimation using b-tensor encoding. <i>NeuroImage</i> , <b>2020</b> , 215, 116832	7.9	12
69	A data-driven approach to optimising the encoding for multi-shell diffusion MRI with application to neonatal imaging. <i>NMR in Biomedicine</i> , <b>2020</b> , 33, e4348	4.4	8
68	MRS and DTI evidence of progressive posterior cingulate cortex and corpus callosum injury in the hyper-acute phase after Traumatic Brain Injury. <i>Brain Injury</i> , <b>2019</b> , 33, 854-868	2.1	2
67	Hierarchical Heterogeneity across Human Cortex Shapes Large-Scale Neural Dynamics. <i>Neuron</i> , <b>2019</b> , 101, 1181-1194.e13	13.9	137
66	Automated processing pipeline for neonatal diffusion MRI in the developing Human Connectome Project. <i>NeuroImage</i> , <b>2019</b> , 185, 750-763	7.9	59
65	Mechanisms and Risk Factors Contributing to Visual Field Deficits following Stereotactic Laser Amygdalohippocampotomy. <i>Stereotactic and Functional Neurosurgery</i> , <b>2019</b> , 97, 255-265	1.6	10

## (2017-2019)

How do spatially distinct frequency specific MEG networks emerge from one underlying structural connectome? The role of the structural eigenmodes. <i>NeuroImage</i> , <b>2019</b> , 186, 211-220	7.9	23
Using GPUs to accelerate computational diffusion MRI: From microstructure estimation to tractography and connectomes. <i>NeuroImage</i> , <b>2019</b> , 188, 598-615	7.9	48
Automated quality control for within and between studies diffusion MRI data using a non-parametric framework for movement and distortion correction. <i>NeuroImage</i> , <b>2019</b> , 184, 801-812	7.9	78
Building connectomes using diffusion MRI: why, how and but. <i>NMR in Biomedicine</i> , <b>2019</b> , 32, e3752	4.4	121
Bayesian Optimisation of Large-Scale Biophysical Networks. <i>NeuroImage</i> , <b>2018</b> , 174, 219-236	7.9	7
A gyral coordinate system predictive of fibre orientations. <i>Neurolmage</i> , <b>2018</b> , 176, 417-430	7.9	7
Time-efficient and flexible design of optimized multishell HARDI diffusion. <i>Magnetic Resonance in Medicine</i> , <b>2018</b> , 79, 1276-1292	4.4	49
Estimation of white matter fiber parameters from compressed multiresolution diffusion MRI using sparse Bayesian learning. <i>NeuroImage</i> , <b>2018</b> , 167, 488-503	7.9	6
Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. <i>NeuroImage</i> , <b>2018</b> , 166, 400-424	7.9	415
Cognition based bTBI mechanistic criteria; a tool for preventive and therapeutic innovations. <i>Scientific Reports</i> , <b>2018</b> , 8, 10273	4.9	21
A biophysical model of dynamic balancing of excitation and inhibition in fast oscillatory large-scale networks. <i>PLoS Computational Biology</i> , <b>2018</b> , 14, e1006007	5	35
Whole brain comparative anatomy using connectivity blueprints. <i>ELife</i> , <b>2018</b> , 7,	8.9	75
Extending the Human Connectome Project across ages: Imaging protocols for the Lifespan Development and Aging projects. <i>NeuroImage</i> , <b>2018</b> , 183, 972-984	7.9	101
Studying neuroanatomy using MRI. <i>Nature Neuroscience</i> , <b>2017</b> , 20, 314-326	25.5	147
On the mechanical behaviour of PEEK and HA cranial implants under impact loading. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2017</b> , 69, 342-354	4.1	48
Image quality transfer and applications in diffusion MRI. <i>NeuroImage</i> , <b>2017</b> , 152, 283-298	7.9	63
Evaluating fibre orientation dispersion in white matter: Comparison of diffusion MRI, histology and polarized light imaging. <i>NeuroImage</i> , <b>2017</b> , 157, 561-574	7.9	95
A Sparse Bayesian Learning Algorithm for White Matter Parameter Estimation from Compressed Multi-shell Diffusion MRI. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 10433, 602-610	0.9	
	Using GPUs to accelerate computational diffusion MRI: From microstructure estimation to tractography and connectomes. <i>NeuroImage</i> , 2019, 188, 598-615  Automated quality control for within and between studies diffusion MRI data using a non-parametric framework for movement and distortion correction. <i>NeuroImage</i> , 2019, 184, 801-812  Building connectomes using diffusion MRI: why, how and but. <i>NMR in Biomedicine</i> , 2019, 32, e3752  Bayesian Optimisation of Large-Scale Biophysical Networks. <i>NeuroImage</i> , 2018, 174, 219-236  A gyral coordinate system predictive of fibre orientations. <i>NeuroImage</i> , 2018, 176, 417-430  Time-efficient and flexible design of optimized multishell HARDI diffusion. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 1276-1292  Estimation of white matter fiber parameters from compressed multiresolution diffusion MRI using sparse Bayesian learning. <i>NeuroImage</i> , 2018, 167, 488-503  Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. <i>NeuroImage</i> , 2018, 166, 400-424  Cognition based bTBI mechanistic criteria; a tool for preventive and therapeutic innovations. <i>Scientific Reports</i> , 2018, 8, 10273  A biophysical model of dynamic balancing of excitation and inhibition in fast oscillatory large-scale networks. <i>PLoS Computational Biology</i> , 2018, 14, e1006007  Whole brain comparative anatomy using connectivity blueprints. <i>ELIfe</i> , 2018, 7,  Extending the Human Connectome Project across ages: Imaging protocols for the Lifespan Development and Aging projects. <i>NeuroImage</i> , 2018, 183, 972-984  Studying neuroanatomy using MRI. <i>Nature Neuroscience</i> , 2017, 20, 314-326  On the mechanical behaviour of PEEK and HA cranial implants under impact loading. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 69, 342-354  Image quality transfer and applications in diffusion MRI. <i>NeuroImage</i> , 2017, 152, 283-298  Evaluating fibre orientation dispersion in white matter: Comparison of diffusion MRI, histology and polarized light imaging. <i>NeuroImage</i> , 2017, 15	Using GPUs to accelerate computational diffusion MRI: From microstructure estimation to tractography and connectomes. NeuroImage, 2019, 188, 598-615  Automated quality control for within and between studies diffusion MRI data using a non-parametric framework for movement and distortion correction. NeuroImage, 2019, 184, 801-812  Building connectomes using diffusion MRI: why, how and but. NMR in Biomedicine, 2019, 184, 801-812  Bayesian Optimisation of Large-Scale Biophysical Networks. NeuroImage, 2018, 174, 219-236  A gyral coordinate system predictive of fibre orientations. NeuroImage, 2018, 176, 417-430  7.9  Time-efficient and flexible design of optimized multishell HARDI diffusion. Magnetic Resonance in Medicine, 2018, 79, 1276-1292  Estimation of white matter fiber parameters from compressed multiresolution diffusion MRI using sparse Bayesian learning. NeuroImage, 2018, 167, 488-503  Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. NeuroImage, 2018, 166, 400-424  Cognition based bTBI mechanistic criteria; a tool for preventive and therapeutic innovations. Scientific Reports, 2018, 8, 10273  A biophysical model of dynamic balancing of excitation and inhibition in fast oscillatory large-scale networks. PLoS Computational Biology, 2018, 14, e1006007  Whole brain comparative anatomy using connectivity blueprints. ELife, 2018, 7,  Extending the Human Connectome Project across ages: Imaging protocols for the Lifespan Development and Aging projects. NeuroImage, 2018, 183, 972-984  Studying neuroanatomy using MRI. Nature Neuroscience, 2017, 20, 314-326  On the mechanical behavior of PEEK and HA cranial implants under impact loading. Journal of the Mechanical Behavior af Biomedical Materials, 2017, 69, 342-354  Image quality transfer and applications in diffusion MRI. NeuroImage, 2017, 152, 283-298  Evaluating fibre orientation dispersion in white matter: Comparison of diffusion MRI, histology and polarized light imaging. NeuroImage, 2017, 157, 561-574  A Sparse Baye

46	Subthalamic deep brain stimulation sweet spots and hyperdirect cortical connectivity in Parkinson\s disease. <i>NeuroImage</i> , <b>2017</b> , 158, 332-345	7.9	131
45	Improved tractography using asymmetric fibre orientation distributions. <i>NeuroImage</i> , <b>2017</b> , 158, 205-2	1 <del>8</del> .9	29
44	The heritability of multi-modal connectivity in human brain activity. ELife, 2017, 6,	8.9	62
43	Bayesian Image Quality Transfer with CNNs: Exploring Uncertainty in dMRI Super-Resolution. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 611-619	0.9	46
42	Author response: The heritability of multi-modal connectivity in human brain activity 2017,		3
41	The Human Connectome Project I neuroimaging approach. <i>Nature Neuroscience</i> , <b>2016</b> , 19, 1175-87	25.5	482
40	Multimodal population brain imaging in the UK Biobank prospective epidemiological study. <i>Nature Neuroscience</i> , <b>2016</b> , 19, 1523-1536	25.5	739
39	Incorporating outlier detection and replacement into a non-parametric framework for movement and distortion correction of diffusion MR images. <i>Neurolmage</i> , <b>2016</b> , 141, 556-572	7.9	288
38	Using Diffusion Tractography to Predict Cortical Connection Strength and Distance: A Quantitative Comparison with Tracers in the Monkey. <i>Journal of Neuroscience</i> , <b>2016</b> , 36, 6758-70	6.6	225
37	An integrated approach to correction for off-resonance effects and subject movement in diffusion MR imaging. <i>Neurolmage</i> , <b>2016</b> , 125, 1063-1078	7.9	1415
36	A probabilistic atlas of the cerebellar white matter. <i>NeuroImage</i> , <b>2016</b> , 124, 724-732	7.9	54
35	Fusion in diffusion MRI for improved fibre orientation estimation: An application to the 3T and 7T data of the Human Connectome Project. <i>Neurolmage</i> , <b>2016</b> , 134, 396-409	7.9	67
34	Heritability of fractional anisotropy in human white matter: a comparison of Human Connectome Project and ENIGMA-DTI data. <i>NeuroImage</i> , <b>2015</b> , 111, 300-11	7.9	159
33	Measuring macroscopic brain connections in vivo. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 1546-55	25.5	225
32	Non-parametric representation and prediction of single- and multi-shell diffusion-weighted MRI data using Gaussian processes. <i>NeuroImage</i> , <b>2015</b> , 122, 166-76	7.9	144
31	Structural Organization of the Corpus Callosum Predicts Attentional Shifts after Continuous Theta Burst Stimulation. <i>Journal of Neuroscience</i> , <b>2015</b> , 35, 15353-68	6.6	29
30	High resolution whole brain diffusion imaging at 7T for the Human Connectome Project. <i>NeuroImage</i> , <b>2015</b> , 122, 318-31	7.9	114
29	Spherical Deconvolution of Multichannel Diffusion MRI Data with Non-Gaussian Noise Models and Spatial Regularization. <i>PLoS ONE</i> , <b>2015</b> , 10, e0138910	3.7	21

## (2008-2015)

28	Sparse Bayesian Inference of White Matter Fiber Orientations from Compressed Multi-resolution Diffusion MRI. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 9349, 117-124	0.9	4
27	MR Diffusion Tractography <b>2014</b> , 429-451		7
26	Study protocol: The Whitehall II imaging sub-study. <i>BMC Psychiatry</i> , <b>2014</b> , 14, 159	4.2	58
25	Mapping Connections in Humans and Non-Human Primates <b>2014</b> , 337-358		31
24	Effects of image reconstruction on fiber orientation mapping from multichannel diffusion MRI: reducing the noise floor using SENSE. <i>Magnetic Resonance in Medicine</i> , <b>2013</b> , 70, 1682-9	4.4	132
23	Advances in diffusion MRI acquisition and processing in the Human Connectome Project. <i>Neurolmage</i> , <b>2013</b> , 80, 125-43	7.9	596
22	RubiX: combining spatial resolutions for Bayesian inference of crossing fibers in diffusion MRI. <i>IEEE Transactions on Medical Imaging</i> , <b>2013</b> , 32, 969-82	11.7	29
21	The topographic connectome. Current Opinion in Neurobiology, 2013, 23, 207-15	7.6	73
20	The minimal preprocessing pipelines for the Human Connectome Project. <i>NeuroImage</i> , <b>2013</b> , 80, 105-24	4 7.9	2298
19	Pushing spatial and temporal resolution for functional and diffusion MRI in the Human Connectome Project. <i>NeuroImage</i> , <b>2013</b> , 80, 80-104	7.9	534
18	Accelerating fibre orientation estimation from diffusion weighted magnetic resonance imaging using GPUs. <i>PLoS ONE</i> , <b>2013</b> , 8, e61892	3.7	101
17	Ball and rackets: Inferring fiber fanning from diffusion-weighted MRI. <i>NeuroImage</i> , <b>2012</b> , 60, 1412-25	7.9	124
16	Model-based analysis of multishell diffusion MR data for tractography: how to get over fitting problems. <i>Magnetic Resonance in Medicine</i> , <b>2012</b> , 68, 1846-55	4.4	222
15	Accelerating Fibre Orientation Estimation from Diffusion Weighted Magnetic Resonance Imaging Using GPUs <b>2012</b> ,		3
14	Exact and analytic bayesian inference for orientation distribution functions 2010,		1
13	Brain tractography using Q-ball imaging and graph theory: Improved connectivities through fibre crossings via a model-based approach. <i>NeuroImage</i> , <b>2010</b> , 49, 2444-56	7.9	52
12	Fuzzy anatomical connectedness of the brain using single and multiple fibre orientations estimated from diffusion MRI. <i>Computerized Medical Imaging and Graphics</i> , <b>2010</b> , 34, 504-13	7.6	4
11	In-vivo brain anatomical connectivity using diffusion magnetic resonance imaging and fuzzy connectedness 2008,		1

10	A regularized two-tensor model fit to low angular resolution diffusion images using basis directions. <i>Journal of Magnetic Resonance Imaging</i> , <b>2008</b> , 28, 199-209	6	27
9	Assessing the direct effects of deep brain stimulation using embedded axon models. <i>Journal of Neural Engineering</i> , <b>2007</b> , 4, 107-19		53
8	Whole brain comparative anatomy using connectivity blueprints		1
7	Using GPUs to accelerate computational diffusion MRI: From microstructure estimation to tractography and connectomes		1
6	Image Processing and Quality Control for the first 10,000 Brain Imaging Datasets from UK Biobank		6
5	On stability of Canonical Correlation Analysis and Partial Least Squares with application to brain-behavior associations		9
4	Hierarchical Heterogeneity Across Human Cortex Shapes Large-Scale Neural Dynamics		4
3	Towards HCP-Style Macaque Connectomes: 24-Channel 3T Multi-Array Coil, MRI Sequences and Preprocess	sing	2
2	A data-driven approach to optimising the encoding for multi-shell diffusion MRI with application to neonatal imaging		1
1	XTRACT - Standardised protocols for automated tractography in the human and macaque brain		3