Daniel C Alexander

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.

276	14,099	58	115
papers	citations	h-index	g-index
307	17,742 ext. citations	5.3	6.79
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
276	Training data distribution significantly impacts the estimation of tissue microstructure with machine learning. <i>Magnetic Resonance in Medicine</i> , 2022 , 87, 932-947	4.4	7
275	Deep Learning-Based Long Term Mortality Prediction in the National Lung Screening Trial. <i>IEEE Access</i> , 2022 , 10, 34369-34378	3.5	
274	Temporal Progression Patterns of Brain Atrophy in Corticobasal Syndrome and Progressive Supranuclear Palsy Revealed by Subtype and Stage Inference (SuStain) <i>Frontiers in Neurology</i> , 2022 , 13, 814768	4.1	1
273	AlzEye: longitudinal record-level linkage of ophthalmic imaging and hospital admissions of 353 157 patients in London, UK <i>BMJ Open</i> , 2022 , 12, e058552	3	1
272	Ten years of image analysis and machine learning competitions in dementia NeuroImage, 2022, 119083	B _{7.9}	1
271	Revealing the Timeline of Structural MRI Changes in Premanifest to Manifest Huntington Disease. <i>Neurology: Genetics</i> , 2021 , 7, e617	3.8	2
270	Degenerative adversarial neuroimage nets for brain scan simulations: Application in ageing and dementia. <i>Medical Image Analysis</i> , 2021 , 75, 102257	15.4	О
269	Presumed small vessel disease, imaging and cognition markers in the Alzheimer's Disease Neuroimaging Initiative. <i>Brain Communications</i> , 2021 , 3, fcab226	4.5	
268	Multiple b-values improve discrimination of cortical gray matter regions using diffusion MRI: an experimental validation with a data-driven approach. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2021 , 34, 677-687	2.8	O
267	Evaluation of PSA and PSA Density in a Multiparametric Magnetic Resonance Imaging-Directed Diagnostic Pathway for Suspected Prostate Cancer: The INNOVATE Trial. <i>Cancers</i> , 2021 , 13,	6.6	1
266	Four distinct trajectories of tau deposition identified in Alzheimer's disease. <i>Nature Medicine</i> , 2021 , 27, 871-881	50.5	81
265	Identifying multiple sclerosis subtypes using unsupervised machine learning and MRI data. <i>Nature Communications</i> , 2021 , 12, 2078	17.4	32
264	Inter-Cohort Validation of SuStaIn Model for Alzheimer's Disease. Frontiers in Big Data, 2021, 4, 661110	2.8	O
263	Characterizing the Clinical Features and Atrophy Patterns of -Related Frontotemporal Dementia With Disease Progression Modeling. <i>Neurology</i> , 2021 , 97, e941-e952	6.5	3
262	Comparison of Neurite Orientation Dispersion and Density Imaging and Two-Compartment Spherical Mean Technique Parameter Maps in Multiple Sclerosis. <i>Frontiers in Neurology</i> , 2021 , 12, 66285	5 5 ^{4.1}	2
261	Uncertainty modelling in deep learning for safer neuroimage enhancement: Demonstration in diffusion MRI. <i>NeuroImage</i> , 2021 , 225, 117366	7.9	21
260	The sequence of structural, functional and cognitive changes in multiple sclerosis. <i>NeuroImage: Clinical</i> , 2021 , 29, 102550	5.3	4

(2021-2021)

259	Validation of low-dose lung cancer PET-CT protocol and PET image improvement using machine learning. <i>Physica Medica</i> , 2021 , 81, 285-294	2.7	3	
258	Diffusion magnetic resonance imaging assessment of regional white matter maturation in preterm neonates. <i>Neuroradiology</i> , 2021 , 63, 573-583	3.2	3	
257	Machine learning based white matter models with permeability: An experimental study in cuprizone treated in-vivo mouse model of axonal demyelination. <i>NeuroImage</i> , 2021 , 224, 117425	7.9	8	
256	Learning to Address Intra-segment Misclassification in Retinal Imaging. <i>Lecture Notes in Computer Science</i> , 2021 , 482-492	0.9	0	
255	A Computationally Efficient Approach to Segmentation of the Aorta and Coronary Arteries Using Deep Learning. <i>IEEE Access</i> , 2021 , 9, 108873-108888	3.5	2	
254	Learning Transition Times in Event Sequences: The Temporal Event-Based Model of Disease Progression. <i>Lecture Notes in Computer Science</i> , 2021 , 583-595	0.9	1	
253	Deep Learning Model Fitting for Diffusion-Relaxometry: A Comparative Study. <i>Mathematics and Visualization</i> , 2021 , 159-172	0.6	2	
252	Generalised Super Resolution for Quantitative MRI Using Self-supervised Mixture of Experts. <i>Lecture Notes in Computer Science</i> , 2021 , 44-54	0.9	0	
251	Detection of covert lesions in focal epilepsy using computational analysis of multimodal magnetic resonance imaging data. <i>Epilepsia</i> , 2021 , 62, 807-816	6.4	4	
250	Improving the characterization of meningioma microstructure in proton therapy from conventional apparent diffusion coefficient measurements using Monte Carlo simulations of diffusion MRI. <i>Medical Physics</i> , 2021 , 48, 1250-1261	4.4	4	
249	Sequence of clinical and neurodegeneration events in Parkinson's disease progression. <i>Brain</i> , 2021 , 144, 975-988	11.2	8	
248	Data-Driven multi-Contrast spectral microstructure imaging with InSpect: INtegrated SPECTral component estimation and mapping. <i>Medical Image Analysis</i> , 2021 , 71, 102045	15.4	6	
247	Joint super-resolution and synthesis of 11mm isotropic MP-RAGE volumes from clinical MRI exams with scans of different orientation, resolution and contrast. <i>NeuroImage</i> , 2021 , 237, 118206	7.9	12	
246	Pleuroparenchymal fibroelastosis in idiopathic pulmonary fibrosis: Survival analysis using visual and computer-based computed tomography assessment. <i>EClinicalMedicine</i> , 2021 , 38, 101009	11.3	О	
245	Ordinal SuStain: Subtype and Stage Inference for Clinical Scores, Visual Ratings, and Other Ordinal Data. <i>Frontiers in Artificial Intelligence</i> , 2021 , 4, 613261	3	2	
244	A Multi-Study Model-Based Evaluation of the Sequence of Imaging and Clinical Biomarker Changes in Huntington's Disease. <i>Frontiers in Big Data</i> , 2021 , 4, 662200	2.8	1	
243	Uncertainty-Aware Annotation Protocol to Evaluate Deformable Registration Algorithms. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 2053-2065	11.7		
242	On the potential for mapping apparent neural soma density via a clinically viable diffusion MRI protocol. <i>NeuroImage</i> , 2021 , 239, 118303	7.9	4	

241	On the generalizability of diffusion MRI signal representations across acquisition parameters, sequences and tissue types: Chronicles of the MEMENTO challenge. <i>NeuroImage</i> , 2021 , 240, 118367	7.9	3
240	Opportunities and Barriers for Adoption of a Decision-Support Tool for Alzheimer Disease. <i>ACM Transactions on Computing for Healthcare</i> , 2021 , 2, 1-19	2.6	O
239	pySuStaIn: a Python implementation of the Subtype and Stage Inference algorithm <i>SoftwareX</i> , 2021 , 16, 100811-100811	2.7	2
238	Anisotropy in the Human Placenta in Pregnancies Complicated by Fetal Growth Restriction. <i>Mathematics and Visualization</i> , 2021 , 263-276	0.6	O
237	Identifying and evaluating clinical subtypes of Alzheimer's disease in care electronic health records using unsupervised machine learning. <i>BMC Medical Informatics and Decision Making</i> , 2021 , 21, 343	3.6	1
236	Analyzing large Alzheimer's disease cognitive datasets: Considerations and challenges. <i>Alzheimeri</i> n and Dementia: Diagnosis, Assessment and Disease Monitoring, 2020 , 12, e12135	5.2	2
235	Microscopic susceptibility anisotropy imaging. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 2739-2753	4.4	4
234	Evolution of white matter damage in amyotrophic lateral sclerosis. <i>Annals of Clinical and Translational Neurology</i> , 2020 , 7, 722-732	5.3	6
233	Prion propagation estimated from brain diffusion MRI is subtype dependent in sporadic Creutzfeldt-Jakob disease. <i>Acta Neuropathologica</i> , 2020 , 140, 169-181	14.3	10
232	Sequences of cognitive decline in typical Alzheimer's disease and posterior cortical atrophy estimated using a novel event-based model of disease progression. <i>Alzheimermand Dementia</i> , 2020 , 16, 965-973	1.2	13
231	Multi-parametric quantitative in vivo spinal cord MRI with unified signal readout and image denoising. <i>NeuroImage</i> , 2020 , 217, 116884	7.9	11
230	Augmenting Dementia Cognitive Assessment With Instruction-Less Eye-Tracking Tests. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020 , 24, 3066-3075	7.2	6
229	Noninvasive diffusion magnetic resonance imaging of brain tumour cell size for the early detection of therapeutic response. <i>Scientific Reports</i> , 2020 , 10, 9223	4.9	10
228	Robust Markers and Sample Sizes for Multicenter Trials of Huntington Disease. <i>Annals of Neurology</i> , 2020 , 87, 751-762	9.4	14
227	Measuring diffusion exchange across the cell membrane with DEXSY (Diffusion Exchange Spectroscopy). <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 1543-1551	4.4	7
226	DeepReg: a deep learning toolkit for medical image registration. <i>Journal of Open Source Software</i> , 2020 , 5, 2705	5.2	6
225	Foveation for Segmentation of Mega-Pixel Histology Images. <i>Lecture Notes in Computer Science</i> , 2020 , 561-571	0.9	1
224	Acquiring and Predicting Multidimensional Diffusion (MUDI) Data: An Open Challenge. <i>Mathematics and Visualization</i> , 2020 , 195-208	0.6	6

223	Learning to Segment When Experts Disagree. Lecture Notes in Computer Science, 2020, 179-190	0.9	3
222	Data-Driven Multi-contrast Spectral Microstructure Imaging with InSpect. <i>Lecture Notes in Computer Science</i> , 2020 , 375-385	0.9	1
221	Reduced neurite density in the brain and cervical spinal cord in relapsing-remitting multiple sclerosis: A NODDI study. <i>Multiple Sclerosis Journal</i> , 2020 , 26, 1647-1657	5	24
220	Disease Progression Modeling in Chronic Obstructive Pulmonary Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2020 , 201, 294-302	10.2	20
219	Higher-order diffusion MRI characterization of mesorectal lymph nodes in rectal cancer. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 348-364	4.4	3
218	Cross-scanner and cross-protocol multi-shell diffusion MRI data harmonization: Algorithms and results. <i>Neurolmage</i> , 2020 , 221, 117128	7.9	17
217	CRAFT (Cerclage after full dilatation caesarean section): protocol of a mixed methods study investigating the role of previous in-labour caesarean section in preterm birth risk. <i>BMC Pregnancy and Childbirth</i> , 2020 , 20, 698	3.2	1
216	ConFiG: Contextual Fibre Growth to generate realistic axonal packing for diffusion MRI simulation. <i>NeuroImage</i> , 2020 , 220, 117107	7.9	14
215	Predicting Alzheimer's disease progression using deep recurrent neural networks. <i>NeuroImage</i> , 2020 , 222, 117203	7.9	23
214	Quantitative detection and staging of presymptomatic cognitive decline in familial Alzheimer's disease: a retrospective cohort analysis. <i>Alzheimerm Research and Therapy</i> , 2020 , 12, 126	9	4
214		9	4 24
	disease: a retrospective cohort analysis. <i>Alzheimer Research and Therapy</i> , 2020 , 12, 126 Mutant huntingtin and neurofilament light have distinct longitudinal dynamics in Huntington's		
213	disease: a retrospective cohort analysis. <i>Alzheimer Research and Therapy</i> , 2020 , 12, 126 Mutant huntingtin and neurofilament light have distinct longitudinal dynamics in Huntington's disease. <i>Science Translational Medicine</i> , 2020 , 12, SANDI: A compartment-based model for non-invasive apparent soma and neurite imaging by	17.5	24
213	disease: a retrospective cohort analysis. Alzheimer Research and Therapy, 2020, 12, 126 Mutant huntingtin and neurofilament light have distinct longitudinal dynamics in Huntington's disease. Science Translational Medicine, 2020, 12, SANDI: A compartment-based model for non-invasive apparent soma and neurite imaging by diffusion MRI. Neurolmage, 2020, 215, 116835 Cross-scanner and cross-protocol diffusion MRI data harmonisation: A benchmark database and	17.5 7.9	24
213 212 211	disease: a retrospective cohort analysis. <i>Alzheimer Research and Therapy</i> , 2020 , 12, 126 Mutant huntingtin and neurofilament light have distinct longitudinal dynamics in Huntington's disease. <i>Science Translational Medicine</i> , 2020 , 12, SANDI: A compartment-based model for non-invasive apparent soma and neurite imaging by diffusion MRI. <i>NeuroImage</i> , 2020 , 215, 116835 Cross-scanner and cross-protocol diffusion MRI data harmonisation: A benchmark database and evaluation of algorithms. <i>NeuroImage</i> , 2019 , 195, 285-299 Current Applications and Future Promises of Machine Learning in Diffusion MRI. <i>Mathematics and</i>	17.5 7.9 7.9	246946
213 212 211 210	disease: a retrospective cohort analysis. <i>Alzheimer Research and Therapy</i> , 2020 , 12, 126 Mutant huntingtin and neurofilament light have distinct longitudinal dynamics in Huntington's disease. <i>Science Translational Medicine</i> , 2020 , 12, SANDI: A compartment-based model for non-invasive apparent soma and neurite imaging by diffusion MRI. <i>NeuroImage</i> , 2020 , 215, 116835 Cross-scanner and cross-protocol diffusion MRI data harmonisation: A benchmark database and evaluation of algorithms. <i>NeuroImage</i> , 2019 , 195, 285-299 Current Applications and Future Promises of Machine Learning in Diffusion MRI. <i>Mathematics and Visualization</i> , 2019 , 105-121 Longitudinal neuroanatomical and cognitive progression of posterior cortical atrophy. <i>Brain</i> , 2019 ,	17.5 7.9 7.9 0.6	2469464
213 212 211 210 209	Mutant huntingtin and neurofilament light have distinct longitudinal dynamics in Huntington's disease. Science Translational Medicine, 2020, 12, SANDI: A compartment-based model for non-invasive apparent soma and neurite imaging by diffusion MRI. NeuroImage, 2020, 215, 116835 Cross-scanner and cross-protocol diffusion MRI data harmonisation: A benchmark database and evaluation of algorithms. NeuroImage, 2019, 195, 285-299 Current Applications and Future Promises of Machine Learning in Diffusion MRI. Mathematics and Visualization, 2019, 105-121 Longitudinal neuroanatomical and cognitive progression of posterior cortical atrophy. Brain, 2019, 142, 2082-2095 Modeling longitudinal imaging biomarkers with parametric Bayesian multi-task learning. Human	17.5 7.9 7.9 0.6	246946436

Applying causal models to explore the mechanism of action of simvastatin in progressive multiple 205 sclerosis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, $110\overline{20}$ $\overline{)}$ $110\overline{27}$ Combined diffusion-relaxometry MRI to identify dysfunction in the human placenta. Magnetic 204 4.4 39 Resonance in Medicine, 2019, 82, 95-106 DIVE: A spatiotemporal progression model of brain pathology in neurodegenerative disorders. 203 7.9 29 Neurolmage, **2019**, 192, 166-177 Abnormal Microstructural Development of the Cerebral Cortex in Neonates With Congenital Heart Disease Is Associated With Impaired Cerebral Oxygen Delivery. Journal of the American Heart 29 Association, 2019, 8, e009893 Fixel-based analysis of the preterm brain: Disentangling bundle-specific white matter microstructural and macrostructural changes in relation to clinical risk factors. NeuroImage: Clinical, 201 18 5.3 2019, 23, 101820 VERDICT MRI for Prostate Cancer: Intracellular Volume Fraction versus Apparent Diffusion 200 20.5 26 Coefficient. Radiology, 2019, 291, 391-397 Different patterns of cortical maturation before and after 38 weeks gestational age demonstrated 199 7.9 43 by diffusion MRI in vivo. Neurolmage, 2019, 185, 764-775 Probing axons using multi-compartmental diffusion in multiple sclerosis. Annals of Clinical and 198 12 5.3 *Translational Neurology*, **2019**, 6, 1595-1605 Multi-study validation of data-driven disease progression models to characterize evolution of 197 5.3 19 biomarkers in Alzheimer's disease. NeuroImage: Clinical, 2019, 24, 101954 SVM recursive feature elimination analyses of structural brain MRI predicts near-term relapses in patients with clinically isolated syndromes suggestive of multiple sclerosis. NeuroImage: Clinical, 196 5.3 2019, 24, 102011 Differences in topological progression profile among neurodegenerative diseases from imaging 8 195 8.9 data. ELife, 2019, 8, Disease Knowledge Transfer across Neurodegenerative Diseases. Lecture Notes in Computer Science 0.9 194 , **2019**, 11765, 860-868 Learning Task-Specific and Shared Representations in Medical Imaging. Lecture Notes in Computer 193 0.9 Science, 2019, 374-383 Multi-stage Prediction Networks for Data Harmonization. Lecture Notes in Computer Science, 2019, 411-419, 192 6 A Framework for Calculating Time-Efficient Diffusion MRI Protocols for Anisotropic IVIM and An 0.6 2 191 Application in the Placenta. *Mathematics and Visualization*, **2019**, 251-263 Degenerative Adversarial NeuroImage Nets: Generating Images that Mimic Disease Progression. 190 0.9 12 Lecture Notes in Computer Science, 2019, 164-172 TADPOLE Challenge: Accurate Alzheimer's disease prediction through crowdsourced forecasting of 189 0.9 14 future data. Lecture Notes in Computer Science, 2019, 11843, 1-10 BrainPainter: A software for the visualisation of brain structures, biomarkers and associated 188 0.9 9 pathological processes. Lecture Notes in Computer Science, 2019, 11846, 112-120

(2018-2019)

187	Deep Learning for Low-Field to High-Field MR: Image Quality Transfer with Probabilistic Decimation Simulator. <i>Lecture Notes in Computer Science</i> , 2019 , 58-70	0.9	6
186	VERDICT MRI validation in fresh and fixed prostate specimens using patient-specific moulds for histological and MR alignment. <i>NMR in Biomedicine</i> , 2019 , 32, e4073	4.4	12
185	Learning From Noisy Labels by Regularized Estimation of Annotator Confusion 2019,		33
184	In Utero Diffusion MRI: Challenges, Advances, and Applications. <i>Topics in Magnetic Resonance Imaging</i> , 2019 , 28, 255-264	2.3	4
183	Relevance of time-dependence for clinically viable diffusion imaging of the spinal cord. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 1247-1264	4.4	18
182	Simplified Luminal Water Imaging for the Detection of Prostate Cancer From Multiecho T MR Images. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, 910-917	5.6	7
181	VERDICT-AMICO: Ultrafast fitting algorithm for non-invasive prostate microstructure characterization. <i>NMR in Biomedicine</i> , 2019 , 32, e4019	4.4	12
180	Neurite density is reduced in the presymptomatic phase of disease. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2019 , 90, 387-394	5.5	31
179	Neurite orientation and dispersion density imaging (NODDI) detects cortical and corticospinal tract degeneration in ALS. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2019 , 90, 404-411	5.5	43
178	A generative model of realistic brain cells with application to numerical simulation of the diffusion-weighted MR signal. <i>NeuroImage</i> , 2019 , 188, 391-402	7.9	30
177	Multi-modal functional MRI to explore placental function over gestation. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 1191-1204	4.4	38
176	Probabilistic disease progression modeling to characterize diagnostic uncertainty: Application to staging and prediction in Alzheimer's disease. <i>NeuroImage</i> , 2019 , 190, 56-68	7.9	46
175	Imaging brain microstructure with diffusion MRI: practicality and applications. <i>NMR in Biomedicine</i> , 2019 , 32, e3841	4.4	161
174	Susceptibility of brain atrophy to in Alzheimer's disease, evidence from functional prioritization in imaging genetics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3162-3167	11.5	25
173	Cortical microstructure in young onset Alzheimer's disease using neurite orientation dispersion and density imaging. <i>Human Brain Mapping</i> , 2018 , 39, 3005-3017	5.9	55
172	Using diffusion MRI to discriminate areas of cortical grey matter. <i>NeuroImage</i> , 2018 , 182, 456-468	7.9	20
171	Deep gray matter volume loss drives disability worsening in multiple sclerosis. <i>Annals of Neurology</i> , 2018 , 83, 210-222	9.4	185
170	An image-based model of brain volume biomarker changes in Huntington's disease. <i>Annals of Clinical and Translational Neurology</i> , 2018 , 5, 570-582	5.3	31

169	Data-driven models of dominantly-inherited Alzheimer's disease progression. <i>Brain</i> , 2018 , 141, 1529-15	54A1.2	66
168	Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. <i>Neurolmage</i> , 2018 , 166, 400-424	7.9	415
167	An optimized framework for quantitative magnetization transfer imaging of the cervical spinal cord in vivo. <i>Magnetic Resonance in Medicine</i> , 2018 , 79, 2576-2588	4.4	7
166	Modeling Alzheimer disease progression using deep recurrent neural networks 2018,		11
165	Microstructure Characterization of Bone Metastases from Prostate Cancer with Diffusion MRI: Preliminary Findings. <i>Frontiers in Oncology</i> , 2018 , 8, 26	5.3	6
164	Uncertainty in Multitask Learning: Joint Representations for Probabilistic MR-only Radiotherapy Planning. <i>Lecture Notes in Computer Science</i> , 2018 , 3-11	0.9	13
163	Placenta microstructure and microcirculation imaging with diffusion MRI. <i>Magnetic Resonance in Medicine</i> , 2018 , 80, 756-766	4.4	38
162	Experimental studies of g-ratio MRI in ex vivo mouse brain. <i>NeuroImage</i> , 2018 , 167, 366-371	7.9	10
161	Deeper Image Quality Transfer: Training Low-Memory Neural Networks for 3D Images. <i>Lecture Notes in Computer Science</i> , 2018 , 118-125	0.9	20
160	Uncovering the heterogeneity and temporal complexity of neurodegenerative diseases with Subtype and Stage Inference. <i>Nature Communications</i> , 2018 , 9, 4273	17.4	125
159	Evaluation of mutant huntingtin and neurofilament proteins as potential markers in Huntington's disease. <i>Science Translational Medicine</i> , 2018 , 10,	17.5	67
158	Accurate estimation of microscopic diffusion anisotropy and its time dependence in the mouse brain. <i>Neurolmage</i> , 2018 , 183, 934-949	7.9	33
157	VERDICT Prostate Parameter Estimation with AMICO. Mathematics and Visualization, 2018, 229-241	0.6	
156	Aging related cognitive changes associated with Alzheimer's disease in Down syndrome. <i>Annals of Clinical and Translational Neurology</i> , 2018 , 5, 741-751	5.3	48
155	Progression of regional grey matter atrophy in multiple sclerosis. <i>Brain</i> , 2018 , 141, 1665-1677	11.2	146
154	Early development of structural networks and the impact of prematurity on brain connectivity. <i>NeuroImage</i> , 2017 , 149, 379-392	7.9	125
153	Image quality transfer and applications in diffusion MRI. <i>NeuroImage</i> , 2017 , 152, 283-298	7.9	63
152	Machine learning based compartment models with permeability for white matter microstructure imaging. <i>NeuroImage</i> , 2017 , 150, 119-135	7.9	52

(2017-2017)

151	ApoE influences regional white-matter axonal density loss in Alzheimer's disease. <i>Neurobiology of Aging</i> , 2017 , 57, 8-17	5.6	49
150	Diffusion MRI microstructure models with in vivo human brain Connectome data: results from a multi-group comparison. <i>NMR in Biomedicine</i> , 2017 , 30, e3734	4.4	26
149	Imaging plus X: multimodal models of neurodegenerative disease. <i>Current Opinion in Neurology</i> , 2017 , 30, 371-379	7.1	50
148	Microstructural models for diffusion MRI in breast cancer and surrounding stroma: an ex vivo study. <i>NMR in Biomedicine</i> , 2017 , 30, e3679	4.4	20
147	Measuring Microscopic Anisotropy with Diffusion Magnetic Resonance: From Material Science to Biomedical Imaging. <i>Mathematics and Visualization</i> , 2017 , 229-255	0.6	1
146	Neurite dispersion: a new marker of multiple sclerosis spinal cord pathology?. <i>Annals of Clinical and Translational Neurology</i> , 2017 , 4, 663-679	5.3	148
145	A tract-specific approach to assessing white matter in preterm infants. <i>NeuroImage</i> , 2017 , 157, 675-694	7.9	23
144	Impaired development of the cerebral cortex in infants with congenital heart disease is correlated to reduced cerebral oxygen delivery. <i>Scientific Reports</i> , 2017 , 7, 15088	4.9	41
143	[P1월43]: MULTIPLE DISTINCT ATROPHY PATTERNS FOUND IN GENETIC FRONTOTEMPORAL DEMENTIA USING SUBTYPE AND STAGE INFERENCE (SUSTAIN) 2017 , 13, P453-P454		1
142	Quantifying Placental Microcirculation and Microstructure with Anisotropic IVIM Models. <i>Placenta</i> , 2017 , 57, 290-291	3.4	1
141	Improved tractography using asymmetric fibre orientation distributions. <i>NeuroImage</i> , 2017 , 158, 205-21	8 .9	29
140	Double oscillating diffusion encoding and sensitivity to microscopic anisotropy. <i>Magnetic Resonance in Medicine</i> , 2017 , 78, 550-564	4.4	25
139	[IC-P-154]: CHARACTERISING THE PROGRESSION OF ALZHEIMER'S DISEASE SUBTYPES USING SUBTYPE AND STAGE INFERENCE (SUSTAIN) 2017 , 13, P116-P117		1
138	Eyetracking Metrics in Young Onset Alzheimer's Disease: A Window into Cognitive Visual Functions. <i>Frontiers in Neurology</i> , 2017 , 8, 377	4.1	29
137	Data-Driven Sequence of Changes to Anatomical Brain Connectivity in Sporadic Alzheimer's Disease. <i>Frontiers in Neurology</i> , 2017 , 8, 580	4.1	29
136	Apparatus for Histological Validation of and Magnetic Resonance Imaging of the Human Prostate. <i>Frontiers in Oncology</i> , 2017 , 7, 47	5.3	22
135	A Vertex Clustering Model for Disease Progression: Application to Cortical Thickness Images. <i>Lecture Notes in Computer Science</i> , 2017 , 134-145	0.9	4
134	Bayesian Image Quality Transfer with CNNs: Exploring Uncertainty in dMRI Super-Resolution. Lecture Notes in Computer Science, 2017, 611-619	0.9	46

133	An Unsupervised Group Average Cortical Parcellation Using Diffusion MRI to Probe Cytoarchitecture. <i>Mathematics and Visualization</i> , 2017 , 145-156	0.6	
132	Detecting and Classifying Nuclei on a Budget. Lecture Notes in Computer Science, 2017, 77-86	0.9	
131	Bayesian Image Quality Transfer. Lecture Notes in Computer Science, 2016, 265-273	0.9	8
130	Bingham-NODDI: Mapping anisotropic orientation dispersion of neurites using diffusion MRI. <i>Neurolmage</i> , 2016 , 133, 207-223	7.9	97
129	PGSE, OGSE, and sensitivity to axon diameter in diffusion MRI: Insight from a simulation study. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 688-700	4.4	82
128	Model-based estimation of microscopic anisotropy using diffusion MRI: a simulation study. <i>NMR in Biomedicine</i> , 2016 , 29, 672-85	4.4	33
127	Concepts of Diffusion in MRI 2016 , 23-35		1
126	Microstructure Imaging Sequence Simulation Toolbox. Lecture Notes in Computer Science, 2016, 34-44	0.9	7
125	Parametric Probability Distribution Functions for Axon Diameters of Corpus Callosum. <i>Frontiers in Neuroanatomy</i> , 2016 , 10, 59	3.6	21
124	P2-144: Model-Based Comparison of Autosomal-Dominant and Late-Onset Alzheimer's Disease Progression in the Dian and ADNI Studies 2016 , 12, P668-P669		3
123	P1-009: A Data-Driven Comparison of the Progression of Brain Atrophy in Posterior Cortical Atrophy and Alzheimer's Disease 2016 , 12, P401-P402		1
122	P1-121: Linking Gene Pathways and Brain Atrophy in Alzheimer's Disease 2016 , 12, P449-P450		O
121	Multi-compartment microscopic diffusion imaging. <i>NeuroImage</i> , 2016 , 139, 346-359	7.9	186
120	A framework for optimal whole-sample histological quantification of neurite orientation dispersion in the human spinal cord. <i>Journal of Neuroscience Methods</i> , 2016 , 273, 20-32	3	20
119	Conventions and nomenclature for double diffusion encoding NMR and MRI. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 82-7	4.4	123
118	Microstructural parameter estimation in vivo using diffusion MRI and structured prior information. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 1787-96	4.4	8
117	Quantitative mapping of the per-axon diffusion coefficients in brain white matter. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 1752-63	4.4	138
116	Towards higher sensitivity and stability of axon diameter estimation with diffusion-weighted MRI. NMR in Biomedicine, 2016 , 29, 293-308	4.4	42

115	Neurite orientation dispersion and density imaging of the healthy cervical spinal cord in vivo. <i>NeuroImage</i> , 2015 , 111, 590-601	7.9	80
114	Diffusion microscopic MRI of the mouse embryo: Protocol and practical implementation in the splotch mouse model. <i>Magnetic Resonance in Medicine</i> , 2015 , 73, 731-9	4.4	2
113	Microstructural characterization of normal and malignant human prostate tissue with vascular, extracellular, and restricted diffusion for cytometry in tumours magnetic resonance imaging. <i>Investigative Radiology</i> , 2015 , 50, 218-27	10.1	99
112	A simulation system for biomarker evolution in neurodegenerative disease. <i>Medical Image Analysis</i> , 2015 , 26, 47-56	15.4	8
111	White matter compartment models for in vivo diffusion MRI at 300mT/m. <i>NeuroImage</i> , 2015 , 118, 468-8	33 7.9	47
110	Accelerated Microstructure Imaging via Convex Optimization (AMICO) from diffusion MRI data. <i>NeuroImage</i> , 2015 , 105, 32-44	7.9	225
109	IC-P-134: Neurite orientation dispersion and density imaging (NODDI) in young-onset Alzheimer's disease and its syndromic variants 2015 , 11, P91-P91		0
108	Mathematical models for the diffusion magnetic resonance signal abnormality in patients with prion diseases. <i>NeuroImage: Clinical</i> , 2015 , 7, 142-54	5.3	10
107	Efficient Gaussian Process-Based Modelling and Prediction of Image Time Series. <i>Lecture Notes in Computer Science</i> , 2015 , 24, 626-37	0.9	7
106	Multiple Orderings of Events in Disease Progression. <i>Lecture Notes in Computer Science</i> , 2015 , 24, 711-2	2 2 0.9	18
105	Modelling Non-stationary and Non-separable Spatio-Temporal Changes in Neurodegeneration via Gaussian Process Convolution. <i>Lecture Notes in Computer Science</i> , 2015 , 35-44	0.9	2
104	Model-Based Estimation of Microscopic Anisotropy in Macroscopically Isotropic Substrates Using Diffusion MRI. <i>Lecture Notes in Computer Science</i> , 2015 , 24, 699-710	0.9	
103	Multimodality characterization of microstructure by the combination of diffusion NMR and time-domain diffuse optical data. <i>Physics in Medicine and Biology</i> , 2014 , 59, 2639-58	3.8	3
102	Information theoretic ranking of four models of diffusion attenuation in fresh and fixed prostate tissue ex vivo. <i>Magnetic Resonance in Medicine</i> , 2014 , 72, 1418-26	4.4	32
101	Viable and fixed white matter: diffusion magnetic resonance comparisons and contrasts at physiological temperature. <i>Magnetic Resonance in Medicine</i> , 2014 , 72, 1151-61	4.4	18
100	Advanced Methods to Study White Matter Microstructure 2014 , 156-163		2
99	In vivo estimation of dispersion anisotropy of neurites using diffusion MRI. <i>Lecture Notes in Computer Science</i> , 2014 , 17, 241-8	0.9	4
98	Machine learning based compartment models with permeability for white matter microstructure imaging. <i>Lecture Notes in Computer Science</i> , 2014 , 17, 257-64	0.9	11

97	Noninvasive quantification of solid tumor microstructure using VERDICT MRI. <i>Cancer Research</i> , 2014 , 74, 1902-12	10.1	144
96	Assessing white matter microstructure of the newborn with multi-shell diffusion MRI and biophysical compartment models. <i>NeuroImage</i> , 2014 , 96, 288-99	7.9	123
95	Advanced diffusion imaging sequences could aid assessing patients with focal cortical dysplasia and epilepsy. <i>Epilepsy Research</i> , 2014 , 108, 336-9	3	98
94	Multiple Fibers 2014 , 105-123		12
93	A ranking of diffusion MRI compartment models with in vivo human brain data. <i>Magnetic Resonance in Medicine</i> , 2014 , 72, 1785-92	4.4	61
92	O2-05-01: A DATA-DRIVEN MODEL OF BIOMARKER CHANGES IN SPORADIC ALZHEIMER'S DISEASE 2014 , 10, P172-P172		3
91	A data-driven model of biomarker changes in sporadic Alzheimer's disease. <i>Brain</i> , 2014 , 137, 2564-77	11.2	149
90	High angular resolution diffusion imaging with stimulated echoes: compensation and correction in experiment design and analysis. <i>NMR in Biomedicine</i> , 2014 , 27, 918-25	4.4	31
89	Learning Imaging Biomarker Trajectories from Noisy Alzheimer Disease Data Using a Bayesian Multilevel Model. <i>Lecture Notes in Computer Science</i> , 2014 , 85-94	0.9	8
88	Image quality transfer via random forest regression: applications in diffusion MRI. <i>Lecture Notes in Computer Science</i> , 2014 , 17, 225-32	0.9	49
87	Gleason Grading of Prostate Tumours with Max-Margin Conditional Random Fields. <i>Lecture Notes in Computer Science</i> , 2014 , 85-92	0.9	6
86	Modelling Vascularity in Breast Cancer and Surrounding Stroma Using Diffusion MRI and Intravoxel Incoherent Motion. <i>Lecture Notes in Computer Science</i> , 2014 , 380-386	0.9	
85	An algorithm to estimate anatomical connectivity between brain regions using diffusion MRI. <i>Magnetic Resonance Imaging</i> , 2013 , 31, 353-8	3.3	1
84	The CONNECT project: Combining macro- and micro-structure. <i>Neurolmage</i> , 2013 , 80, 273-82	7.9	93
83	Optimising oscillating waveform-shape for pore size sensitivity in diffusion-weighted MR. <i>Microporous and Mesoporous Materials</i> , 2013 , 178, 11-14	5.3	9
82	Gaussian phase distribution approximations for oscillating gradient spin echo diffusion MRI. <i>Journal of Magnetic Resonance</i> , 2013 , 227, 25-34	3	39
81	Magnetic resonance imaging evidence for presymptomatic change in thalamus and caudate in familial Alzheimer's disease. <i>Brain</i> , 2013 , 136, 1399-414	11.2	148
80	Ranking diffusion-MRI models with in-vivo human brain data 2013,		1

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79	Contrast and stability of the axon diameter index from microstructure imaging with diffusion MRI. <i>Magnetic Resonance in Medicine</i> , 2013 , 70, 711-21	4.4	100
78	Using high angular resolution diffusion imaging data to discriminate cortical regions. <i>PLoS ONE</i> , 2013 , 8, e63842	3.7	28
77	Beyond crossing fibers: tractography exploiting sub-voxel fibre dispersion and neighbourhood structure. <i>Lecture Notes in Computer Science</i> , 2013 , 23, 402-13	0.9	15
76	Can T2-spectroscopy resolve submicrometer axon diameters?. <i>Lecture Notes in Computer Science</i> , 2013 , 23, 607-18	0.9	4
75	The importance of being dispersed: A ranking of diffusion MRI models for fibre dispersion using in vivo human brain data. <i>Lecture Notes in Computer Science</i> , 2013 , 16, 74-81	0.9	11
74	Estimation of pore size in a microstructure phantom using the optimised gradient waveform diffusion weighted NMR sequence. <i>Journal of Magnetic Resonance</i> , 2012 , 214, 51-60	3	34
73	Interactive lesion segmentation with shape priors from offline and online learning. <i>IEEE Transactions on Medical Imaging</i> , 2012 , 31, 1698-712	11.7	18
72	Structure Tensor Informed Fiber Tractography (STIFT) by combining gradient echo MRI and diffusion weighted imaging. <i>NeuroImage</i> , 2012 , 59, 3941-54	7.9	15
71	Compartment models of the diffusion MR signal in brain white matter: a taxonomy and comparison. <i>NeuroImage</i> , 2012 , 59, 2241-54	7.9	314
70	An event-based model for disease progression and its application in familial Alzheimer's disease and Huntington's disease. <i>Neurolmage</i> , 2012 , 60, 1880-9	7.9	125
69	NODDI: practical in vivo neurite orientation dispersion and density imaging of the human brain. <i>NeuroImage</i> , 2012 , 61, 1000-16	7.9	1589
68	A new approach to structural integrity assessment based on axial and radial diffusivities. <i>Functional Neurology</i> , 2012 , 27, 85-90	2.2	19
67	Predicting Clinically Definite Multiple Sclerosis from Onset Using SVM. <i>Lecture Notes in Computer Science</i> , 2012 , 116-123	0.9	1
66	Axon diameter mapping in the presence of orientation dispersion with diffusion MRI. <i>NeuroImage</i> , 2011 , 56, 1301-15	7.9	192
65	Optimising time-varying gradient orientation for microstructure sensitivity in diffusion-weighted MR. <i>Journal of Magnetic Resonance</i> , 2011 , 212, 344-54	3	27
64	The matrix formalism for generalised gradients with time-varying orientation in diffusion NMR. <i>Journal of Magnetic Resonance</i> , 2011 , 210, 151-7	3	41
63	An ex vivo imaging pipeline for producing high-quality and high-resolution diffusion-weighted imaging datasets. <i>Human Brain Mapping</i> , 2011 , 32, 544-63	5.9	166
62	An event-based disease progression model and its application to familial Alzheimer's disease. <i>Lecture Notes in Computer Science</i> , 2011 , 22, 748-59	0.9	9

61	Axon diameter mapping in crossing fibers with diffusion MRI. <i>Lecture Notes in Computer Science</i> , 2011 , 14, 82-9	0.9	15
60	The structural plasticity of white matter networks following anterior temporal lobe resection. <i>Brain</i> , 2010 , 133, 2348-64	11.2	97
59	Orientationally invariant indices of axon diameter and density from diffusion MRI. <i>NeuroImage</i> , 2010 , 52, 1374-89	7.9	527
58	Optimizing gradient waveforms for microstructure sensitivity in diffusion-weighted MR. <i>Journal of Magnetic Resonance</i> , 2010 , 206, 41-51	3	7°
57	MicroTrack: an algorithm for concurrent projectome and microstructure estimation. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 183-90	0.9	37
56	High-fidelity meshes from tissue samples for diffusion MRI simulations. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 404-11	0.9	17
55	Axon diameter mapping in the presence of orientation dispersion with diffusion MRI. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 640-7	0.9	1
54	In-vivo estimates of axonal characteristics using optimized diffusion MRI protocols for single fibre orientation. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 623-30	0.9	2
53	Modelling, Fitting and Sampling in Diffusion MRI. Mathematics and Visualization, 2009, 3-20	0.6	8
52	Using the model-based residual bootstrap to quantify uncertainty in fiber orientations from Q-ball analysis. <i>IEEE Transactions on Medical Imaging</i> , 2009 , 28, 535-50	11.7	37
51	Convergence and parameter choice for Monte-Carlo simulations of diffusion MRI. <i>IEEE Transactions on Medical Imaging</i> , 2009 , 28, 1354-64	11.7	143
50	Multiple Fibers 2009 , 55-72		21
49	Active imaging with dual spin-echo diffusion MRI. Lecture Notes in Computer Science, 2009, 21, 264-75	0.9	4
48	Two-compartment models of the diffusion MR signal in brain white matter. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 329-36	0.9	10
47	Evidence for segregated and integrative connectivity patterns in the human Basal Ganglia. <i>Journal of Neuroscience</i> , 2008 , 28, 7143-52	6.6	576
46	White matter connections reflect changes in voluntary-guided saccades in pre-symptomatic Huntington's disease. <i>Brain</i> , 2008 , 131, 196-204	11.2	143
45	Regularized super-resolution for diffusion MRI 2008,		8
44	Model-based registration to correct for motion between acquisitions in diffusion MR imaging 2008,		6

(2005-2008)

43	A general framework for experiment design in diffusion MRI and its application in measuring direct tissue-microstructure features. <i>Magnetic Resonance in Medicine</i> , 2008 , 60, 439-48	4.4	247
42	Axon radius measurements in vivo from diffusion MRI: a feasibility study 2007,		5
41	A method for improving the performance of gradient systems for diffusion-weighted MRI. <i>Magnetic Resonance in Medicine</i> , 2007 , 58, 763-8	4.4	32
40	Optimal acquisition orders of diffusion-weighted MRI measurements. <i>Journal of Magnetic Resonance Imaging</i> , 2007 , 25, 1051-8	5.6	105
39	Exploiting peak anisotropy for tracking through complex structures 2007,		23
38	Guest Editorial Special Issue on Computational Diffusion MRI. <i>IEEE Transactions on Medical Imaging</i> , 2007 , 26, 1425-1427	11.7	
37	Abnormalities of language networks in temporal lobe epilepsy. <i>NeuroImage</i> , 2007 , 36, 209-21	7.9	143
36	Validation of in vitro probabilistic tractography. <i>NeuroImage</i> , 2007 , 37, 1267-77	7.9	194
35	Optimal acquisition schemes for in vivo quantitative magnetization transfer MRI. <i>Magnetic Resonance in Medicine</i> , 2006 , 56, 803-10	4.4	75
34	Non-invasive mapping of corticofugal fibres from multiple motor areasrelevance to stroke recovery. <i>Brain</i> , 2006 , 129, 1844-58	11.2	200
33	Deformable registration of diffusion tensor MR images with explicit orientation optimization. <i>Medical Image Analysis</i> , 2006 , 10, 764-85	15.4	377
32	Hemispheric asymmetries in language-related pathways: a combined functional MRI and tractography study. <i>NeuroImage</i> , 2006 , 32, 388-99	7.9	333
31	Diffusion-Tensor Image Registration. <i>Mathematics and Visualization</i> , 2006 , 327-342	0.6	4
30	An Introduction to Computational Diffusion MRI: the Diffusion Tensor and Beyond. <i>Mathematics and Visualization</i> , 2006 , 83-106	0.6	24
29	Lateralization of ventral and dorsal auditory-language pathways in the human brain. <i>NeuroImage</i> , 2005 , 24, 656-66	7.9	411
28	Optimal imaging parameters for fiber-orientation estimation in diffusion MRI. <i>NeuroImage</i> , 2005 , 27, 357-67	7.9	191
27	Maximum entropy spherical deconvolution for diffusion MRI. <i>Lecture Notes in Computer Science</i> , 2005 , 19, 76-87	0.9	77
26	Multiple-fiber reconstruction algorithms for diffusion MRI. <i>Annals of the New York Academy of Sciences</i> , 2005 , 1064, 113-33	6.5	185

25	Probabilistic anatomical connectivity derived from the microscopic persistent angular structure of cerebral tissue. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2005 , 360, 893-902	5.8	279
24	Camino: Diffusion MRI reconstruction and processing. <i>The Insight Journal</i> , 2005 ,		115
23	Persistent Angular Structure: new insights from diffusion MRI data. Dummy version. <i>Lecture Notes in Computer Science</i> , 2003 , 18, 672-83	0.9	118
22	Diffusion Tensor Orientation Matching for Image Registration 2003,		3
21	A method for non-rigid registration of diffusion tensor magnetic resonance images 2003 , 5032, 1186		2
20	Persistent angular structure: new insights from diffusion magnetic resonance imaging data. <i>Inverse Problems</i> , 2003 , 19, 1031-1046	2.3	247
19	Probabilistic Monte Carlo based mapping of cerebral connections utilising whole-brain crossing fibre information. <i>Lecture Notes in Computer Science</i> , 2003 , 18, 684-95	0.9	146
18	Spatial Normalization and Averaging of Diffusion Tensor MRI Data Sets. <i>NeuroImage</i> , 2002 , 17, 592-617	7.9	189
17	Statistical Modeling of Colour Data. International Journal of Computer Vision, 2001, 44, 87-109	10.6	9
16	A Regularization Scheme for Diffusion Tensor Magnetic Resonance Images. <i>Lecture Notes in Computer Science</i> , 2001 , 92-105	0.9	30
15	Elastic Matching of Diffusion Tensor Images. Computer Vision and Image Understanding, 2000, 77, 233-25	5.	64
14	Techniques for spatial normalization of diffusion tensor images 2000 , 3979, 470		8
13	Image Processing and Quality Control for the first 10,000 Brain Imaging Datasets from UK Biobank		6
12	Longitudinal dynamics of mutant huntingtin and neurofilament light in Huntington disease: the prospective HD-CSF study		2
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