

Karla L Miller

List of Publications by Year in descending order

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Version: 2024-02-01

121
papers

25,915
citations

31976

53
h-index

18647

119
g-index

151
all docs

151
docs citations

151
times ranked

23060
citing authors

#	ARTICLE	IF	CITATIONS
1	Model-based dynamic off-resonance correction for improved accelerated fMRI in awake behaving nonhuman primates. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 2922-2932.	3.0	4
2	The Digital Brain Bank, an open access platform for post-mortem imaging datasets. <i>ELife</i> , 2022, 11, .	6.0	22
3	SARS-CoV-2 is associated with changes in brain structure in UK Biobank. <i>Nature</i> , 2022, 604, 697-707.	27.8	825
4	Social connections predict brain structure in a multidimensional free-ranging primate society. <i>Science Advances</i> , 2022, 8, eabl5794.	10.3	20
5	Phenotypic and genetic associations of quantitative magnetic susceptibility in UK Biobank brain imaging. <i>Nature Neuroscience</i> , 2022, 25, 818-831.	14.8	21
6	Associations between moderate alcohol consumption, brain iron, and cognition in UK Biobank participants: Observational and mendelian randomization analyses. <i>PLoS Medicine</i> , 2022, 19, e1004039.	8.4	28
7	Ultrahigh Resolution fMRI at 7T Using Radial-Cartesian TURBINE Sampling. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 2058-2073.	3.0	5
8	Confound modelling in UK Biobank brain imaging. <i>NeuroImage</i> , 2021, 224, 117002.	4.2	135
9	Medium-term effects of SARS-CoV-2 infection on multiple vital organs, exercise capacity, cognition, quality of life and mental health, post-hospital discharge. <i>EClinicalMedicine</i> , 2021, 31, 100683.	7.1	435
10	Quantifying myelin in crossing fibers using diffusion-prepared phase imaging: Theory and simulations. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 2618-2634.	3.0	2
11	Diffusion MRI data, sulcal anatomy, and tractography for eight species from the Primate Brain Bank. <i>Brain Structure and Function</i> , 2021, 226, 2497-2509.	2.3	12
12	Subspace-constrained approaches to low-rank fMRI acceleration. <i>NeuroImage</i> , 2021, 238, 118235.	4.2	5
13	A method to remove the influence of fixative concentration on postmortem T_2 maps using a kinetic tensor model. <i>Human Brain Mapping</i> , 2021, 42, 5956-5972.	3.6	4
14	Adapting the UK Biobank Brain Imaging Protocol and Analysis Pipeline for the C-MORE Multi-Organ Study of COVID-19 Survivors. <i>Frontiers in Neurology</i> , 2021, 12, 753284.	2.4	16
15	Resonate: Reaching Excellence Through Equity, Diversity, and Inclusion in ISMRM. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 53, 1608-1611.	3.4	3
16	Use of multi-flip angle measurements to account for transmit inhomogeneity and non-Gaussian diffusion in DW-SSFP. <i>NeuroImage</i> , 2020, 220, 117113.	4.2	7
17	Methods for quantitative susceptibility and $R2^*$ mapping in whole post-mortem brains at 7T applied to amyotrophic lateral sclerosis. <i>NeuroImage</i> , 2020, 222, 117216.	4.2	37
18	Longitudinal connections and the organization of the temporal cortex in macaques, great apes, and humans. <i>PLoS Biology</i> , 2020, 18, e3000810.	5.6	49

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19	The UK Biobank imaging enhancement of 100,000 participants: rationale, data collection, management and future directions. <i>Nature Communications</i> , 2020, 11, 2624.	12.8	324
20	Modeling an equivalent b^* value in diffusion-weighted steady-state free precession. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 873-884.	3.0	11
21	White matter structure and myelin-related gene expression alterations with experience in adult rats. <i>Progress in Neurobiology</i> , 2020, 187, 101770.	5.7	30
22	Brain aging comprises many modes of structural and functional change with distinct genetic and biophysical associations. <i>ELife</i> , 2020, 9, .	6.0	122
23	<i>Ex vivo</i> diffusion MRI of the human brain: Technical challenges and recent advances. <i>NMR in Biomedicine</i> , 2019, 32, e3941.	2.8	106
24	Joint modelling of diffusion MRI and microscopy. <i>NeuroImage</i> , 2019, 201, 116014.	4.2	19
25	Relating diffusion tensor imaging measurements to microstructural quantities in the cerebral cortex in multiple sclerosis. <i>Human Brain Mapping</i> , 2019, 40, 4417-4431.	3.6	21
26	Improved statistical efficiency of simultaneous multi-slice fMRI by reconstruction with spatially adaptive temporal smoothing. <i>NeuroImage</i> , 2019, 203, 116165.	4.2	5
27	Resonate: Reflections and recommendations on implicit biases within the ISMRM. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 49, 1509-1511.	3.4	1
28	Estimation of brain age delta from brain imaging. <i>NeuroImage</i> , 2019, 200, 528-539.	4.2	274
29	A 3D k-space Fourier encoding and reconstruction framework for simultaneous multi-slab acquisition. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1012-1024.	3.0	7
30	White matter changes in the perforant path area in patients with amyotrophic lateral sclerosis. <i>Neuropathology and Applied Neurobiology</i> , 2019, 45, 570-585.	3.2	22
31	The spatial correspondence and genetic influence of interhemispheric connectivity with white matter microstructure. <i>Nature Neuroscience</i> , 2019, 22, 809-819.	14.8	56
32	Diffusion Acceleration with Gaussian process Estimated Reconstruction (DAGER). <i>Magnetic Resonance in Medicine</i> , 2019, 82, 107-125.	3.0	19
33	A method for correcting breathing-induced field fluctuations in T_2^* -weighted spinal cord imaging using a respiratory trace. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 3745-3753.	3.0	18
34	Preserved extrastriate visual network in a monkey with substantial, naturally occurring damage to primary visual cortex. <i>ELife</i> , 2019, 8, .	6.0	19
35	Template-based field map prediction for rapid whole brain B_0 shimming. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 171-180.	3.0	5
36	Recovering task fMRI signals from highly under-sampled data with low-rank and temporal subspace constraints. <i>NeuroImage</i> , 2018, 174, 97-110.	4.2	15

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37	The effect of realistic geometries on the susceptibility-weighted MR signal in white matter. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 489-500.	3.0	45
38	Choice of reference measurements affects quantification of long diffusion time behaviour using stimulated echoes. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 952-959.	3.0	3
39	Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. <i>NeuroImage</i> , 2018, 166, 400-424.	4.2	1,026
40	Spatiotemporal characterization of breathing-induced B0 field fluctuations in the cervical spinal cord at 7T. <i>NeuroImage</i> , 2018, 167, 191-202.	4.2	31
41	Genome-wide association studies of brain imaging phenotypes in UK Biobank. <i>Nature</i> , 2018, 562, 210-216.	27.8	551
42	Microstructural imaging of the human brain with a "super-scanner": 10 key advantages of ultra-strong gradients for diffusion MRI. <i>NeuroImage</i> , 2018, 182, 8-38.	4.2	138
43	Dissecting the pathobiology of altered MRI signal in amyotrophic lateral sclerosis: A post mortem whole brain sampling strategy for the integration of ultra-high-field MRI and quantitative neuropathology. <i>BMC Neuroscience</i> , 2018, 19, 11.	1.9	47
44	Studying neuroanatomy using MRI. <i>Nature Neuroscience</i> , 2017, 20, 314-326.	14.8	220
45	Image formation in diffusion MRI: A review of recent technical developments. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 46, 646-662.	3.4	97
46	Evaluating fibre orientation dispersion in white matter: Comparison of diffusion MRI, histology and polarized light imaging. <i>NeuroImage</i> , 2017, 157, 561-574.	4.2	141
47	Pathology of callosal damage in ALS: An ex-vivo, 7 T diffusion tensor MRI study. <i>NeuroImage: Clinical</i> , 2017, 15, 200-208.	2.7	40
48	PEAR: PERiodic And fixed Rank separation for fast fMRI. <i>Medical Physics</i> , 2017, 44, 6166-6182.	3.0	11
49	Motion correction for functional MRI with three-dimensional hybrid radial-Cartesian EPI. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 527-540.	3.0	28
50	Optimization of 4D vessel-selective arterial spin labeling angiography using balanced steady-state free precession and vessel-encoding. <i>NMR in Biomedicine</i> , 2016, 29, 776-786.	2.8	31
51	Accelerating functional MRI using fixed-rank approximations and radial-Cartesian sampling. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 1825-1836.	3.0	29
52	High-resolution diffusion MRI at 7T using a three-dimensional multi-slab acquisition. <i>NeuroImage</i> , 2016, 143, 1-14.	4.2	55
53	Multimodal population brain imaging in the UK Biobank prospective epidemiological study. <i>Nature Neuroscience</i> , 2016, 19, 1523-1536.	14.8	1,414
54	Dentatorubrothalamic tract localization with postmortem MR diffusion tractography compared to histological 3D reconstruction. <i>Brain Structure and Function</i> , 2016, 221, 3487-3501.	2.3	43

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55	The extreme capsule fiber complex in humans and macaque monkeys: a comparative diffusion MRI tractography study. <i>Brain Structure and Function</i> , 2016, 221, 4059-4071.	2.3	91
56	Reducing slab boundary artifacts in three-dimensional multislab diffusion MRI using nonlinear inversion for slab profile encoding (NPEN). <i>Magnetic Resonance in Medicine</i> , 2016, 76, 1183-1195.	3.0	32
57	A model for extra-axonal diffusion spectra with frequency-dependent restriction. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 2306-2320.	3.0	15
58	Diffusion tensor imaging of dolphin brains reveals direct auditory pathway to temporal lobe. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20151203.	2.6	36
59	Scan time reduction for readout-segmented EPI using simultaneous multislice acceleration: Diffusion-weighted imaging at 3 and 7 Tesla. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 136-149.	3.0	70
60	A positive-negative mode of population covariation links brain connectivity, demographics and behavior. <i>Nature Neuroscience</i> , 2015, 18, 1565-1567.	14.8	782
61	FASTER: Acceleration of functional MRI data acquisition using low rank constraints. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 353-364.	3.0	58
62	<i>Advanced MRI Methods</i> , 2015, , 85-91.		0
63	Primate comparative neuroscience using magnetic resonance imaging: promises and challenges. <i>Frontiers in Neuroscience</i> , 2014, 8, 298.	2.8	49
64	Improving diffusion-weighted imaging of post-mortem human brains: SSFP at 7T. <i>NeuroImage</i> , 2014, 102, 579-589.	4.2	42
65	<i>Diffusion Acquisition</i> , 2014, , 35-61.		2
66	A Neural Circuit Covarying with Social Hierarchy in Macaques. <i>PLoS Biology</i> , 2014, 12, e1001940.	5.6	133
67	ICA-based artefact removal and accelerated fMRI acquisition for improved resting state network imaging. <i>NeuroImage</i> , 2014, 95, 232-247.	4.2	1,148
68	Group-PCA for very large fMRI datasets. <i>NeuroImage</i> , 2014, 101, 738-749.	4.2	218
69	Study protocol: the Whitehall II imaging sub-study. <i>BMC Psychiatry</i> , 2014, 14, 159.	2.6	82
70	Optimizing RetrolCor and RetroKCor corrections for multi-shot 3D FMRI acquisitions. <i>NeuroImage</i> , 2014, 84, 394-405.	4.2	15
71	3D Multislab diffusion-weighted readout-segmented EPI with real-time cardiac-reordered k-space acquisition. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 1565-1579.	3.0	38
72	Causal effect of disconnection lesions on interhemispheric functional connectivity in rhesus monkeys. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13982-13987.	7.1	195

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73	Functional connectomics from resting-state fMRI. <i>Trends in Cognitive Sciences</i> , 2013, 17, 666-682.	7.8	802
74	Detecting microstructural properties of white matter based on compartmentalization of magnetic susceptibility. <i>NeuroImage</i> , 2013, 70, 1-9.	4.2	76
75	Resting-state fMRI in the Human Connectome Project. <i>NeuroImage</i> , 2013, 80, 144-168.	4.2	1,367
76	Pushing spatial and temporal resolution for functional and diffusion MRI in the Human Connectome Project. <i>NeuroImage</i> , 2013, 80, 80-104.	4.2	769
77	Motor Skill Learning Induces Changes in White Matter Microstructure and Myelination. <i>Journal of Neuroscience</i> , 2013, 33, 19499-19503.	3.6	369
78	A combined post-mortem magnetic resonance imaging and quantitative histological study of multiple sclerosis pathology. <i>Brain</i> , 2012, 135, 2938-2951.	7.6	131
79	Temporally-independent functional modes of spontaneous brain activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 3131-3136.	7.1	696
80	The danger of systematic bias in group-level FMRI-lag-based causality estimation. <i>NeuroImage</i> , 2012, 59, 1228-1229.	4.2	54
81	Diffusion tractography of post-mortem human brains: Optimization and comparison of spin echo and steady-state free precession techniques. <i>NeuroImage</i> , 2012, 59, 2284-2297.	4.2	70
82	FMRI using balanced steady-state free precession (SSFP). <i>NeuroImage</i> , 2012, 62, 713-719.	4.2	41
83	Implementation and assessment of diffusion-weighted partial Fourier readout-segmented echo-planar imaging. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 441-451.	3.0	33
84	DANTE-prepared pulse trains: A novel approach to motion-sensitized and motion-suppressed quantitative magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1423-1438.	3.0	116
85	Steady-state MRI: methods for neuroimaging. <i>Imaging in Medicine</i> , 2011, 3, 93-105.	0.0	17
86	Diffusion imaging of whole, post-mortem human brains on a clinical MRI scanner. <i>NeuroImage</i> , 2011, 57, 167-181.	4.2	239
87	Real-time cardiac synchronization with fixed volume frame rate for reducing physiological instabilities in 3D FMRI. <i>NeuroImage</i> , 2011, 57, 1364-1375.	4.2	14
88	Network modelling methods for FMRI. <i>NeuroImage</i> , 2011, 54, 875-891.	4.2	1,588
89	Social Network Size Affects Neural Circuits in Macaques. <i>Science</i> , 2011, 334, 697-700.	12.6	435
90	Spectral characteristics of resting state networks. <i>Progress in Brain Research</i> , 2011, 193, 259-276.	1.4	164

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91	Diffusion-Weighted Imaging Tractography-Based Parcellation of the Human Parietal Cortex and Comparison with Human and Macaque Resting-State Functional Connectivity. <i>Journal of Neuroscience</i> , 2011, 31, 4087-4100.	3.6	446
92	Addressing a systematic vibration artifact in diffusion-weighted MRI. <i>Human Brain Mapping</i> , 2010, 31, 193-202.	3.6	85
93	Steady-state diffusion-weighted imaging: theory, acquisition and analysis. <i>NMR in Biomedicine</i> , 2010, 23, 781-793.	2.8	39
94	3D steady-state diffusion-weighted imaging with trajectory using radially batched internal navigator echoes (TURBINE). <i>Magnetic Resonance in Medicine</i> , 2010, 63, 235-242.	3.0	34
95	Asymmetries of the balanced SSFP profile. Part I: Theory and observation. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 385-395.	3.0	32
96	Asymmetries of the balanced SSFP profile. Part II: White matter. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 396-406.	3.0	27
97	Reducing distortions in diffusion-weighted echo planar imaging with a dual-echo blip-reversed sequence. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 382-390.	3.0	49
98	Multiplexed Echo Planar Imaging for Sub-Second Whole Brain fMRI and Fast Diffusion Imaging. <i>PLoS ONE</i> , 2010, 5, e15710.	2.5	1,164
99	Connectivity-based segmentation of the substantia nigra in human and its implications in Parkinson's disease. <i>NeuroImage</i> , 2010, 52, 1175-1180.	4.2	124
100	Reduced limbic connections may contraindicate subgenual cingulate deep brain stimulation for intractable depression. <i>Journal of Neurosurgery</i> , 2009, 111, 780-784.	1.6	23
101	TREMR: T1-resonance elastography with MR. <i>Magnetic Resonance in Medicine</i> , 2009, 62, 815-821.	3.0	26
102	Cerebral Blood Flow, Blood Volume, and Oxygen Metabolism Dynamics in Human Visual and Motor Cortex as Measured by Whole-Brain Multi-Modal Magnetic Resonance Imaging. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009, 29, 1856-1866.	4.3	84
103	Cortical and subcortical connections within the pedunculopontine nucleus of the primate <i>Macaca mulatta</i> determined using probabilistic diffusion tractography. <i>Journal of Clinical Neuroscience</i> , 2009, 16, 413-420.	1.5	30
104	Correspondence of the brain's functional architecture during activation and rest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 13040-13045.	7.1	4,636
105	High resolution diffusion-weighted imaging in fixed human brain using diffusion-weighted steady state free precession. <i>NeuroImage</i> , 2009, 46, 775-785.	4.2	166
106	MRI characteristics of the substantia nigra in Parkinson's disease: A combined quantitative T1 and DTI study. <i>NeuroImage</i> , 2009, 47, 435-441.	4.2	163
107	Sensitivity of diffusion weighted steady state free precession to anisotropic diffusion. <i>Magnetic Resonance in Medicine</i> , 2008, 60, 405-413.	3.0	39
108	Modeling SSFP functional MRI contrast in the brain. <i>Magnetic Resonance in Medicine</i> , 2008, 60, 661-673.	3.0	44

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109	Measuring the Effects of Remifentanyl on Cerebral Blood Flow and Arterial Arrival Time Using 3D Grase MRI with Pulsed Arterial Spin Labelling. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 1514-1522.	4.3	89
110	Physiological noise modelling for spinal functional magnetic resonance imaging studies. NeuroImage, 2008, 39, 680-692.	4.2	212
111	Evidence for a vascular contribution to diffusion FMRI at high <i>b</i> value. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20967-20972.	7.1	81
112	Meaningful design and contrast estimability in FMRI. NeuroImage, 2007, 34, 127-136.	4.2	60
113	Signal and noise characteristics of SSFP FMRI: A comparison with GRE at multiple field strengths. NeuroImage, 2007, 37, 1227-1236.	4.2	42
114	Acquisition and voxelwise analysis of multi-subject diffusion data with Tract-Based Spatial Statistics. Nature Protocols, 2007, 2, 499-503.	12.0	526
115	High-resolution FMRI at 1.5T using balanced SSFP. Magnetic Resonance in Medicine, 2006, 55, 161-170.	3.0	66
116	Respiration-induced B0 field fluctuation compensation in balanced SSFP: Real-time approach for transition-band SSFP fMRI. Magnetic Resonance in Medicine, 2006, 55, 1197-1201.	3.0	38
117	Steady-state diffusion-weighted imaging of in vivo knee cartilage. Magnetic Resonance in Medicine, 2004, 51, 394-398.	3.0	117
118	Discrepancies between BOLD and flow dynamics in primary and supplementary motor areas: application of the balloon model to the interpretation of BOLD transients. NeuroImage, 2004, 21, 144-153.	4.2	226
119	Nonlinear phase correction for navigated diffusion imaging. Magnetic Resonance in Medicine, 2003, 50, 343-353.	3.0	166
120	Functional brain imaging using a blood oxygenation sensitive steady state. Magnetic Resonance in Medicine, 2003, 50, 675-683.	3.0	78
121	Nonlinear temporal dynamics of the cerebral blood flow response. Human Brain Mapping, 2001, 13, 1-12.	3.6	183