

Manus J Donahue

List of Publications by Citations

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123
papers

2,744
citations

30
h-index

46
g-index

130
ext. papers

3,414
ext. citations

5.6
avg, IF

5.2
L-index

#	Paper	IF	Citations
123	Baseline GABA concentration and fMRI response. <i>NeuroImage</i> , 2010 , 53, 392-8	7.9	139
122	Theoretical and experimental investigation of the VASO contrast mechanism. <i>Magnetic Resonance in Medicine</i> , 2006 , 56, 1261-73	4.4	124
121	Assessment of ischemic penumbra in patients with hyperacute stroke using amide proton transfer (APT) chemical exchange saturation transfer (CEST) MRI. <i>NMR in Biomedicine</i> , 2014 , 27, 163-74	4.4	106
120	Detrimental effects of BOLD signal in arterial spin labeling fMRI at high field strength. <i>Magnetic Resonance in Medicine</i> , 2006 , 56, 546-52	4.4	84
119	An account of the discrepancy between MRI and PET cerebral blood flow measures. A high-field MRI investigation. <i>NMR in Biomedicine</i> , 2006 , 19, 1043-54	4.4	81
118	Separation of macrovascular signal in multi-inversion time arterial spin labelling MRI. <i>Magnetic Resonance in Medicine</i> , 2010 , 63, 1357-65	4.4	79
117	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, 1856-66	7.3	76
116	Non-invasive imaging of oxygen extraction fraction in adults with sickle cell anaemia. <i>Brain</i> , 2016 , 139, 738-50	11.2	67
115	Impact of a single bout of aerobic exercise on regional brain perfusion and activation responses in healthy young adults. <i>PLoS ONE</i> , 2014 , 9, e85163	3.7	59
114	Blood oxygenation level-dependent (BOLD) total and extravascular signal changes and R_2^* in human visual cortex at 1.5, 3.0 and 7.0 T. <i>NMR in Biomedicine</i> , 2011 , 24, 25-34	4.4	59
113	Hemodynamic changes after visual stimulation and breath holding provide evidence for an uncoupling of cerebral blood flow and volume from oxygen metabolism. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 176-85	7.3	59
112	Increased hippocampal CA1 cerebral blood volume in schizophrenia. <i>NeuroImage: Clinical</i> , 2014 , 5, 359-64	3.3	58
111	Relationships between hypercarbic reactivity, cerebral blood flow, and arterial circulation times in patients with moyamoya disease. <i>Journal of Magnetic Resonance Imaging</i> , 2013 , 38, 1129-39	5.6	56
110	Alterations in default-mode network connectivity may be influenced by cerebrovascular changes within 1 week of sports related concussion in college varsity athletes: a pilot study. <i>Brain Imaging and Behavior</i> , 2016 , 10, 559-68	4.1	55
109	Novel MRI approaches for assessing cerebral hemodynamics in ischemic cerebrovascular disease. <i>Stroke</i> , 2012 , 43, 903-15	6.7	54
108	Inflow-based vascular-space-occupancy (iVASO) MRI. <i>Magnetic Resonance in Medicine</i> , 2011 , 66, 40-56	4.4	53
107	Absolute arterial cerebral blood volume quantification using inflow vascular-space-occupancy with dynamic subtraction magnetic resonance imaging. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010 , 30, 1329-42	7.3	52

106	Visualization of altered neurovascular coupling in chronic stroke patients using multimodal functional MRI. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012 , 32, 2044-54	7.3	49
105	Routine clinical evaluation of cerebrovascular reserve capacity using carbogen in patients with intracranial stenosis. <i>Stroke</i> , 2014 , 45, 2335-41	6.7	48
104	MRI techniques to measure arterial and venous cerebral blood volume. <i>NeuroImage</i> , 2019 , 187, 17-31	7.9	46
103	Bolus arrival time and cerebral blood flow responses to hypercarbia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 1243-52	7.3	45
102	Lower cardiac index levels relate to lower cerebral blood flow in older adults. <i>Neurology</i> , 2017 , 89, 2327-2334	6.3	42
101	Evaluation of human brain tumor heterogeneity using multiple T1-based MRI signal weighting approaches. <i>Magnetic Resonance in Medicine</i> , 2008 , 59, 336-44	4.4	41
100	Cortical depth dependence of the BOLD initial dip and poststimulus undershoot in human visual cortex at 7 Tesla. <i>Magnetic Resonance in Medicine</i> , 2015 , 73, 2283-95	4.4	38
99	Time delay processing of hypercapnic fMRI allows quantitative parameterization of cerebrovascular reactivity and blood flow delays. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016 , 36, 1767-1779	7.3	38
98	Assessment of lymphatic impairment and interstitial protein accumulation in patients with breast cancer treatment-related lymphedema using CEST MRI. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 345-55	4.4	35
97	Gray matter blood flow and volume are reduced in association with white matter hyperintensity lesion burden: a cross-sectional MRI study. <i>Frontiers in Aging Neuroscience</i> , 2015 , 7, 131	5.3	34
96	Cerebral hemodynamics and pseudo-continuous arterial spin labeling considerations in adults with sickle cell anemia. <i>NMR in Biomedicine</i> , 2017 , 30, e3681	4.4	33
95	Consensus statement on current and emerging methods for the diagnosis and evaluation of cerebrovascular disease. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018 , 38, 1391-1417	7.3	33
94	Tissue Sodium Content is Elevated in the Skin and Subcutaneous Adipose Tissue in Women with Lipedema. <i>Obesity</i> , 2018 , 26, 310-317	8	32
93	Ventral striatal network connectivity reflects reward learning and behavior in patients with Parkinson's disease. <i>Human Brain Mapping</i> , 2018 , 39, 509-521	5.9	30
92	Hemodynamic mechanisms underlying elevated oxygen extraction fraction (OEF) in moyamoya and sickle cell anemia patients. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018 , 38, 1618-1630	7.3	29
91	Neuroimaging of vascular reserve in patients with cerebrovascular diseases. <i>NeuroImage</i> , 2019 , 187, 192-208	7.9	29
90	Structural and functional connectivity of the nondecussating dentato-rubro-thalamic tract. <i>NeuroImage</i> , 2018 , 176, 364-371	7.9	28
89	Magnetization transfer enhanced vascular-space-occupancy (MT-VASO) functional MRI. <i>Magnetic Resonance in Medicine</i> , 2009 , 61, 944-51	4.4	27

88	Clinical feasibility of noninvasive visualization of lymphatic flow with principles of spin labeling MR imaging: implications for lymphedema assessment. <i>Radiology</i> , 2013 , 269, 893-902	20.5	26
87	Nigrostriatal and Mesolimbic D Receptor Expression in Parkinson's Disease Patients with Compulsive Reward-Driven Behaviors. <i>Journal of Neuroscience</i> , 2018 , 38, 3230-3239	6.6	25
86	Dual echo vessel-encoded ASL for simultaneous BOLD and CBF reactivity assessment in patients with ischemic cerebrovascular disease. <i>Magnetic Resonance in Medicine</i> , 2015 , 73, 1579-92	4.4	25
85	Effect of inflow of fresh blood on vascular-space-occupancy (VASO) contrast. <i>Magnetic Resonance in Medicine</i> , 2009 , 61, 473-80	4.4	25
84	End points for sickle cell disease clinical trials: patient-reported outcomes, pain, and the brain. <i>Blood Advances</i> , 2019 , 3, 3982-4001	7.8	25
83	Mesocorticolimbic hemodynamic response in Parkinson's disease patients with compulsive behaviors. <i>Movement Disorders</i> , 2017 , 32, 1574-1583	7	24
82	The Vanderbilt Memory & Aging Project: Study Design and Baseline Cohort Overview. <i>Journal of Alzheimer's Disease</i> , 2016 , 52, 539-59	4.3	24
81	Neuronal activation induced BOLD and CBF responses upon acetazolamide administration in patients with steno-occlusive artery disease. <i>NeuroImage</i> , 2015 , 105, 276-85	7.9	22
80	Crossed cerebellar diaschisis after stroke identified noninvasively with cerebral blood flow-weighted arterial spin labeling MRI. <i>European Journal of Radiology</i> , 2016 , 85, 136-142	4.7	21
79	Vascular space occupancy (VASO) cerebral blood volume-weighted MRI identifies hemodynamic impairment in patients with carotid artery disease. <i>Journal of Magnetic Resonance Imaging</i> , 2009 , 29, 718-24	5.6	21
78	White matter differences between essential tremor and Parkinson disease. <i>Neurology</i> , 2019 , 92, e30-e36	6.5	21
77	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. <i>Human Brain Mapping</i> , 2012 , 33, 511-22	5.9	18
76	Lymphedema evaluation using noninvasive 3T MR lymphangiography. <i>Journal of Magnetic Resonance Imaging</i> , 2017 , 46, 1349-1360	5.6	16
75	Silent infarct is a risk factor for infarct recurrence in adults with sickle cell anemia. <i>Neurology</i> , 2018 , 91, e781-e784	6.5	16
74	The vascular steal phenomenon is an incomplete contributor to negative cerebrovascular reactivity in patients with symptomatic intracranial stenosis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 1453-62	7.3	16
73	Neuroimaging Advances in Pediatric Stroke. <i>Stroke</i> , 2019 , 50, 240-248	6.7	15
72	Dopamine effects on frontal cortical blood flow and motor inhibition in Parkinson's disease. <i>Cortex</i> , 2019 , 115, 99-111	3.8	15
71	Vessel-encoded arterial spin labeling (VE-ASL) reveals elevated flow territory asymmetry in older adults with substandard verbal memory performance. <i>Journal of Magnetic Resonance Imaging</i> , 2014 , 39, 377-86	5.6	15

70	Diffusion along perivascular spaces reveals evidence supportive of glymphatic function impairment in Parkinson disease. <i>Parkinsonism and Related Disorders</i> , 2021 , 89, 98-104	3.6	15
69	Perfusion and pH MRI in familial hemiplegic migraine with prolonged aura. <i>Cephalalgia</i> , 2016 , 36, 279-836.1		14
68	Prior Infarcts, Reactivity, and Angiography in Moyamoya Disease (PIRAMD): a scoring system for moyamoya severity based on multimodal hemodynamic imaging. <i>Journal of Neurosurgery</i> , 2017 , 126, 495-503	3.2	14
67	Quantitative magnetization transfer imaging of the human locus coeruleus. <i>NeuroImage</i> , 2019 , 200, 191-198	4.98	14
66	Arterial Spin Labeling and Blood Oxygen Level-Dependent MRI Cerebrovascular Reactivity in Cerebrovascular Disease: A Systematic Review and Meta-Analysis. <i>Cerebrovascular Diseases</i> , 2016 , 42, 288-307	3.2	14
65	Interrogating the Functional Correlates of Collateralization in Patients with Intracranial Stenosis Using Multimodal Hemodynamic Imaging. <i>American Journal of Neuroradiology</i> , 2016 , 37, 1132-8	4.4	14
64	Differential cerebral hemometabolic responses to blood transfusions in adults and children with sickle cell anemia. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 49, 466-477	5.6	14
63	The cumulative influence of hyperoxia and hypercapnia on blood oxygenation and R* ₂ . <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015 , 35, 2032-42	7.3	13
62	[F]allypride characterization of striatal and extrastriatal D receptors in Parkinson's disease. <i>NeuroImage: Clinical</i> , 2018 , 18, 433-442	5.3	13
61	Lipedema and Lymphedema Disease: A New Application of Bioimpedance. <i>Lymphatic Research and Biology</i> , 2019 , 17, 671-679	2.3	13
60	Preliminary evidence for cerebral capillary shunting in adults with sickle cell anemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019 , 39, 1099-1110	7.3	13
59	Anterior-posterior gradient differences in lobar and cingulate cortex cerebral blood flow in late-life depression. <i>Journal of Psychiatric Research</i> , 2018 , 97, 1-7	5.2	13
58	Cortical Implications of Advancing Age and Disease Duration in Parkinson's Disease Patients with Postural Instability and Gait Dysfunction. <i>Journal of Parkinson's Disease</i> , 2016 , 6, 441-51	5.3	12
57	Clinical Use of Cerebrovascular Compliance Imaging to Evaluate Revascularization in Patients With Moyamoya. <i>Neurosurgery</i> , 2019 , 84, 261-271	3.2	12
56	Bilateral Changes in Deep Tissue Environment After Manual Lymphatic Drainage in Patients with Breast Cancer Treatment-Related Lymphedema. <i>Lymphatic Research and Biology</i> , 2017 , 15, 45-56	2.3	11
55	Frontocingulate cerebral blood flow and cerebrovascular reactivity associated with antidepressant response in late-life depression. <i>Journal of Affective Disorders</i> , 2017 , 215, 103-110	6.6	11
54	Noise concerns and post-processing procedures in cerebral blood flow (CBF) and cerebral blood volume (CBV) functional magnetic resonance imaging. <i>NeuroImage</i> , 2017 , 154, 43-58	7.9	11
53	Classifying intracranial stenosis disease severity from functional MRI data using machine learning. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020 , 40, 705-719	7.3	11

52	Planning-free cerebral blood flow territory mapping in patients with intracranial arterial stenosis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017 , 37, 1944-1958	7.3	10
51	Impact of vessel wall lesions and vascular stenoses on cerebrovascular reactivity in patients with intracranial stenotic disease. <i>Journal of Magnetic Resonance Imaging</i> , 2017 , 46, 1167-1176	5.6	10
50	Haploidentical bone marrow transplantation improves cerebral hemodynamics in adults with sickle cell disease. <i>American Journal of Hematology</i> , 2019 , 94, E155-E158	7.1	10
49	In vivo quantification of hyperoxic arterial blood water T1. <i>NMR in Biomedicine</i> , 2015 , 28, 1518-25	4.4	10
48	Linear and Curvilinear Trajectories of Cortical Loss with Advancing Age and Disease Duration in Parkinson's Disease 2016 , 7, 220-9		10
47	Variable impact of CSF flow suppression on quantitative 3.0T intracranial vessel wall measurements. <i>Journal of Magnetic Resonance Imaging</i> , 2018 , 48, 1120-1128	5.6	9
46	Gamma-aminobutyric acid (GABA) concentration inversely correlates with basal perfusion in human occipital lobe. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 532-41	7.3	8
45	Functional MRI using spin lock editing preparation pulses. <i>Magnetic Resonance Imaging</i> , 2014 , 32, 813-8	3.3	8
44	Inverse correspondence between hippocampal perfusion and verbal memory performance in older adults. <i>Hippocampus</i> , 2013 , 23, 213-20	3.5	8
43	Inflow-vascular space occupancy (iVASO) reproducibility in the hippocampus and cortex at different blood water nulling times. <i>Magnetic Resonance in Medicine</i> , 2016 , 75, 2379-87	4.4	8
42	CEST MRI quantification procedures for breast cancer treatment-related lymphedema therapy evaluation. <i>Magnetic Resonance in Medicine</i> , 2020 , 83, 1760-1773	4.4	8
41	Family History of Alzheimer's Disease is Associated with Impaired Perceptual Discrimination of Novel Objects. <i>Journal of Alzheimer's Disease</i> , 2017 , 57, 735-745	4.3	7
40	Vessel wall and lumen characteristics with age in healthy participants using 3T intracranial vessel wall magnetic resonance imaging. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, 1452-1460	5.6	7
39	Elevated brain oxygen extraction fraction in preterm newborns with anemia measured using noninvasive MRI. <i>Journal of Perinatology</i> , 2018 , 38, 1636-1643	3.1	7
38	Choroid plexus perfusion and intracranial cerebrospinal fluid changes after angiogenesis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020 , 40, 1658-1671	7.3	6
37	Reduced oxygen extraction efficiency in sickle cell anemia patients with evidence of cerebral capillary shunting. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 41, 546-560	7.3	6
36	Intracranial and Extracranial Vascular Stenosis as Risk Factors for Stroke in Sickle Cell Disease. <i>Pediatric Neurology</i> , 2021 , 114, 29-34	2.9	6
35	3.0T relaxation time measurements of human lymph nodes in adults with and without lymphatic insufficiency: Implications for magnetic resonance lymphatic imaging. <i>NMR in Biomedicine</i> , 2018 , 31, e40094	4.4	6

34	Upper and Lower Extremity Measurement of Tissue Sodium and Fat Content in Patients with Lipedema. <i>Obesity</i> , 2020 , 28, 907-915	8	5
33	Hippocampal arterial cerebral blood volume in early psychosis. <i>Psychiatry Research - Neuroimaging</i> , 2016 , 256, 21-25	2.9	5
32	Matching of postcontraction perfusion to oxygen consumption across submaximal contraction intensities in exercising humans. <i>Journal of Applied Physiology</i> , 2015 , 119, 280-9	3.7	5
31	The effect of echo time and post-processing procedure on blood oxygenation level-dependent (BOLD) functional connectivity analysis. <i>NeuroImage</i> , 2014 , 95, 39-47	7.9	5
30	Medial temporal lobe volumes in late-life depression: effects of age and vascular risk factors. <i>Brain Imaging and Behavior</i> , 2020 , 14, 19-29	4.1	5
29	Comparison of Cortical and Subcortical Measurements in Normal Older Adults across Databases and Software Packages. <i>Journal of Alzheimer's Disease Reports</i> , 2017 , 1, 59-70	3.3	4
28	The Regulation of Cerebral Spinal Fluid Flow and Its Relevance to the Glymphatic System. <i>Current Neurology and Neuroscience Reports</i> , 2020 , 20, 58	6.6	4
27	Amnesic mild cognitive impairment individuals with dissimilar pathologic origins show common regional vulnerability in the default mode network. <i>Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring</i> , 2018 , 10, 717-725	5.2	4
26	A cross-sectional, case-control study of intracranial arterial wall thickness and complete blood count measures in sickle cell disease. <i>British Journal of Haematology</i> , 2021 , 192, 769-777	4.5	3
25	Vessel Wall and Lumen Features in North American Moyamoya Patients. <i>Clinical Neuroradiology</i> , 2020 , 30, 545-552	2.7	3
24	Mapping the orbitofrontal cortex using temporal fluctuations in cerebral blood flow. <i>Brain and Behavior</i> , 2021 , 11, e02034	3.4	3
23	Cerebral blood flow territory instability in patients with atherosclerotic intracranial stenosis. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, 1441-1451	5.6	2
22	Evidence of transfusion-induced reductions in cerebral capillary shunting in sickle cell disease. <i>American Journal of Hematology</i> , 2020 , 95, E228-E230	7.1	2
21	Magnetic resonance imaging and bioimpedance evaluation of lymphatic abnormalities in patients with breast cancer treatment-related lymphedema. <i>Breast Cancer Research and Treatment</i> , 2020 , 183, 83-94	4.4	2
20	Cerebral hemodynamics and metabolism are similar in sickle cell disease patients with hemoglobin SS and S β thalassemia phenotypes. <i>American Journal of Hematology</i> , 2020 , 95, E66-E68	7.1	2
19	Implementation of Single-Tab Electrodes for Bioimpedance Spectroscopy Measures. <i>Lymphatic Research and Biology</i> , 2020 , 18, 277-283	2.3	2
18	A Prospective, Longitudinal Magnetic Resonance Imaging Evaluation of Cerebrovascular Reactivity and Infarct Development in Patients With Intracranial Stenosis. <i>Journal of Magnetic Resonance Imaging</i> , 2021 , 54, 912-922	5.6	2
17	Cerebral Hemodynamics and Executive Function in Sickle Cell Anemia. <i>Stroke</i> , 2021 , 52, 1830-1834	6.7	2

16	Parasagittal dural space and cerebrospinal fluid (CSF) flow across the lifespan in healthy adults.. <i>Fluids and Barriers of the CNS</i> , 2022 , 19, 24	7	2
15	Neuroimaging of Cerebral Blood Flow and Sodium in Women with Lipedema. <i>Obesity</i> , 2020 , 28, 1292-1300	7.1	1
14	Treatment of Progressive Herpes Zoster-Induced Vasculopathy with Surgical Revascularization: Effects on Cerebral Hemodynamics. <i>World Neurosurgery</i> , 2018 , 111, 132-138	2.1	1
13	Correlating hemodynamic magnetic resonance imaging with high-field intracranial vessel wall imaging in stroke. <i>Journal of Radiology Case Reports</i> , 2014 , 8, 1-10	1.1	1
12	Reduction in transcranial doppler ultrasound (TCD) velocity after regular blood transfusion therapy is associated with a change in hemoglobin S fraction in sickle cell anemia. <i>American Journal of Hematology</i> , 2020 , 95, E308-E310	7.1	1
11	Choroid plexus perfusion in sickle cell disease and moyamoya vasculopathy: Implications for lymphatic flow. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 41, 2699-2711	7.3	1
10	Dopamine-induced changes to thalamic GABA concentration in impulsive Parkinson disease patients.. <i>Npj Parkinsons Disease</i> , 2022 , 8, 37	9.7	1
9	Using novel magnetic resonance imaging methods to predict stroke risk in individuals with sickle cell anemia. <i>Hematology/ Oncology and Stem Cell Therapy</i> , 2020 , 13, 76-84	2.7	0
8	Hemodynamic and metabolic changes during hypercapnia with normoxia and hyperoxia using pCASL and TRUST MRI in healthy adults. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 271678X211064572	7.3	0
7	Elevated magnetic resonance imaging measures of adipose tissue deposition in women with breast cancer treatment-related lymphedema. <i>Breast Cancer Research and Treatment</i> , 2021 , 1	4.4	0
6	Elevated cerebral blood flow in patients with pure autonomic failure. <i>Clinical Autonomic Research</i> , 2021 , 31, 405-414	4.3	0
5	Advances in neuroimaging to improve care in sickle cell disease. <i>Lancet Neurology, The</i> , 2021 , 20, 398-408	4.1	0
4	Safety of 3 Tesla Magnetic Resonance Imaging in Patients with Sickle Cell Disease. <i>Radiology Research and Practice</i> , 2021 , 2021, 5531775	2.3	0
3	Lower cerebral oxygen utilization is associated with Alzheimer's disease-related neurodegeneration and poorer cognitive performance among apolipoprotein E ϵ 4 carriers. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 271678X211056393	7.3	0
2	Clinical Translation of Cerebrovascular Reactivity Mapping. <i>NeuroMethods</i> , 2022 , 185-206	0.4	0
1	Resolution and inversion time dependence of CBF measurements using MRI: A possible explanation for discrepancy between MRI and PET. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2005 , 25, S320-S320	7.3	0