Marcus E Raichle

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The human brain is intrinsically organized into dynamic, anticorrelated functional networks. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9673-9678.	7.1	7,496
2	Spontaneous fluctuations in brain activity observed with functional magnetic resonance imaging. Nature Reviews Neuroscience, 2007, 8, 700-711.	10.2	5,936
3	Searching for a baseline: Functional imaging and the resting human brain. Nature Reviews Neuroscience, 2001, 2, 685-694.	10.2	2,994
4	The Brain's Default Mode Network. Annual Review of Neuroscience, 2015, 38, 433-447.	10.7	2,749
5	Subgenual prefrontal cortex abnormalities in mood disorders. Nature, 1997, 386, 824-827.	27.8	2,502
6	Distinct brain networks for adaptive and stable task control in humans. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11073-11078.	7.1	2,290
7	A default mode of brain function: A brief history of an evolving idea. NeuroImage, 2007, 37, 1083-1090.	4.2	1,887
8	Spontaneous neuronal activity distinguishes human dorsal and ventral attention systems. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10046-10051.	7.1	1,843
9	Common Blood Flow Changes across Visual Tasks: II. Decreases in Cerebral Cortex. Journal of Cognitive Neuroscience, 1997, 9, 648-663.	2.3	1,690
10	Evidence for a Frontoparietal Control System Revealed by Intrinsic Functional Connectivity. Journal of Neurophysiology, 2008, 100, 3328-3342.	1.8	1,627
11	BRAIN WORK AND BRAIN IMAGING. Annual Review of Neuroscience, 2006, 29, 449-476.	10.7	1,393
12	Coherent Spontaneous Activity Identifies a Hippocampal-Parietal Memory Network. Journal of Neurophysiology, 2006, 96, 3517-3531.	1.8	924
13	Two views of brain function. Trends in Cognitive Sciences, 2010, 14, 180-190.	7.8	916
14	A quantitative model for the in vivo assessment of drug binding sites with positron emission tomography. Annals of Neurology, 1984, 15, 217-227.	5.3	897
15	The Temporal Structures and Functional Significance of Scale-free Brain Activity. Neuron, 2010, 66, 353-369.	8.1	831
16	Intrinsic Fluctuations within Cortical Systems Account for Intertrial Variability in Human Behavior. Neuron, 2007, 56, 171-184.	8.1	731
17	The pathophysiology of brain ischemia. Annals of Neurology, 1983, 13, 2-10.	5.3	629
18	Anatomic Localization and Quantitative Analysis of Gradient Refocused Echo-Planar fMRI Susceptibility Artifacts. NeuroImage, 1997, 6, 156-167.	4.2	624

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19	Appraising the brain's energy budget. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10237-10239.	7.1	598
20	The Restless Brain. Brain Connectivity, 2011, 1, 3-12.	1.7	563
21	Human brain activity time-locked to perceptual event boundaries. Nature Neuroscience, 2001, 4, 651-655.	14.8	462
22	Mapping human visual cortex with positron emission tomography. Nature, 1986, 323, 806-809.	27.8	413
23	Spatial patterns of neuroimaging biomarker change in individuals from families with autosomal dominant Alzheimer's disease: a longitudinal study. Lancet Neurology, The, 2018, 17, 241-250.	10.2	383
24	Trends and properties of human cerebral cortex: Correlations with cortical myelin content. NeuroImage, 2014, 93, 165-175.	4.2	369
25	Noninvasive Functional and Structural Connectivity Mapping of the Human Thalamocortical System. Cerebral Cortex, 2010, 20, 1187-1194.	2.9	327
26	Neuroscience. The brain's dark energy. Science, 2006, 314, 1249-50.	12.6	317
27	A focal brain abnormality in panic disorder, a severe form of anxiety. Nature, 1984, 310, 683-685.	27.8	315
28	The restless brain: how intrinsic activity organizes brain function. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140172.	4.0	313
29	Aerobic Glycolysis in the Human Brain Is Associated with Development and Neotenous Gene Expression. Cell Metabolism, 2014, 19, 49-57.	16.2	305
30	Blood flow changes in human somatosensory cortex during anticipated stimulation. Nature, 1995, 373, 249-252.	27.8	294
31	Physiological responses to focal cerebral ischemia in humans. Annals of Neurology, 1984, 16, 546-552.	5.3	267
32	Evidence of the Limitations of Water as a Freely Diffusible Tracer in Brain of the Rhesus Monkey. Circulation Research, 1974, 35, 358-364.	4.5	262
33	A Paradigm Shift in Functional Brain Imaging. Journal of Neuroscience, 2009, 29, 12729-12734.	3.6	235
34	Loss of Brain Aerobic Glycolysis in Normal Human Aging. Cell Metabolism, 2017, 26, 353-360.e3.	16.2	228
35	Stimulus rate determines regional brain blood flow in striate cortex. Annals of Neurology, 1985, 17, 303-305.	5.3	227
36	A brief history of human brain mapping. Trends in Neurosciences, 2009, 32, 118-126.	8.6	209

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37	Intrinsic brain activity sets the stage for expression of motivated behavior. Journal of Comparative Neurology, 2005, 493, 167-176.	1.6	201
38	Spatial and Temporal Organization of the Individual Human Cerebellum. Neuron, 2018, 100, 977-993.e7.	8.1	201
39	Partial volume correction in quantitative amyloid imaging. NeuroImage, 2015, 107, 55-64.	4.2	188
40	Common Blood Flow Changes across Visual Tasks: I. Increases in Subcortical Structures and Cerebellum but Not in Nonvisual Cortex. Journal of Cognitive Neuroscience, 1997, 9, 624-647.	2.3	176
41	On the role of the corpus callosum in interhemispheric functional connectivity in humans. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13278-13283.	7.1	176
42	Cerebellar blood flow and metabolism in cerebral hemisphere infarction. Annals of Neurology, 1983, 14, 168-176.	5.3	172
43	Lag threads organize the brain's intrinsic activity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2235-44.	7.1	168
44	The Emotional Modulation of Cognitive Processing: An fMRI Study. Journal of Cognitive Neuroscience, 2000, 12, 157-170.	2.3	167
45	Measurement of regional cerebral blood volume by emission tomography. Annals of Neurology, 1978, 4, 322-328.	5.3	154
46	Positron emmission tomography in the asphyxiated term newborn: Parasagittal impairment of cerebral blood flow. Annals of Neurology, 1985, 17, 287-296.	5.3	153
47	On the existence of a generalized non-specific task-dependent network. Frontiers in Human Neuroscience, 2015, 9, 430.	2.0	153
48	Spontaneous Infra-slow Brain Activity Has Unique Spatiotemporal Dynamics and Laminar Structure. Neuron, 2018, 98, 297-305.e6.	8.1	152
49	Hierarchical dynamics as a macroscopic organizing principle of the human brain. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20890-20897.	7.1	139
50	The Brain's Dark Energy. Scientific American, 2010, 302, 44-49.	1.0	136
51	Persistent metabolic youth in the aging female brain. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3251-3255.	7.1	133
52	Tau PET in autosomal dominant Alzheimer's disease: relationship with cognition, dementia and other biomarkers. Brain, 2019, 142, 1063-1076.	7.6	122
53	Functional MRI studies of word-stem completion: Reliability across laboratories and comparison to blood flow imaging with PET. Human Brain Mapping, 1998, 6, 203-215.	3.6	116
54	Feeding the brain and nurturing the mind: Linking nutrition and the gut microbiota to brain development. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14105-14112.	7.1	114

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55	Plasticity and Spontaneous Activity Pulses in Disused Human Brain Circuits. Neuron, 2020, 107, 580-589.e6.	8.1	114
56	Functional Connectivity in Autosomal Dominant and Late-Onset Alzheimer Disease. JAMA Neurology, 2014, 71, 1111.	9.0	112
57	How networks communicate: propagation patterns in spontaneous brain activity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150546.	4.0	112
58	Global waves synchronize the brain's functional systems with fluctuating arousal. Science Advances, 2021, 7, .	10.3	110
59	Bold insights. Nature, 2001, 412, 128-130.	27.8	109
60	Transient BOLD responses at block transitions. NeuroImage, 2005, 28, 956-966.	4.2	109
61	Resting States Affect Spontaneous BOLD Oscillations in Sensory and Paralimbic Cortex. Journal of Neurophysiology, 2008, 100, 922-931.	1.8	109
62	Propagated infra-slow intrinsic brain activity reorganizes across wake and slow wave sleep. ELife, 2015, 4, .	6.0	104
63	Functional Brain Imaging and Human Brain Function. Journal of Neuroscience, 2003, 23, 3959-3962.	3.6	102
64	Tracer-Kinetic Models for Measuring Cerebral Blood Flow Using Externally Detected Radiotracers. Journal of Cerebral Blood Flow and Metabolism, 1987, 7, 443-463.	4.3	100
65	Human cortical–hippocampal dialogue in wake and slow-wave sleep. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6868-E6876.	7.1	98
66	Individual-specific functional connectivity of the amygdala: A substrate for precision psychiatry. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3808-3818.	7.1	96
67	Homonuclear J coupling effects in volume localized NMR spectroscopy: Pitfalls and solutions. Magnetic Resonance in Medicine, 1998, 39, 169-178.	3.0	92
68	Brain Blood Volume, Flow, and Oxygen Utilization Measured with ¹⁵ O Radiotracers and Positron Emission Tomography: Revised Metabolic Computations. Journal of Cerebral Blood Flow and Metabolism, 1987, 7, 513-516.	4.3	85
69	Regional Correction of Positron Emission Tomography Data for the Effects of Cerebral Atrophy. Journal of Cerebral Blood Flow and Metabolism, 1988, 8, 662-670.	4.3	85
70	Correction of Positron Emission Tomography Data for Cerebral Atrophy. Journal of Cerebral Blood Flow and Metabolism, 1986, 6, 120-124.	4.3	82
71	Pure hemidystonia with basal ganglion abnormalities on positron emission tomography. Annals of Neurology, 1984, 15, 228-233.	5.3	78
72	Aerobic glycolysis and tau deposition in preclinical Alzheimer's disease. Neurobiology of Aging, 2018, 67, 95-98.	3.1	73

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73	The scratchpad of the mind. Nature, 1993, 363, 583-584.	27.8	72
74	Brain aerobic glycolysis functions and Alzheimer's disease. Clinical and Translational Imaging, 2015, 3, 27-37.	2.1	71
75	Searching for activations that generalize over tasks. , 1997, 5, 317-322.		68
76	Brain aerobic glycolysis and motor adaptation learning. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3782-91.	7.1	62
77	Functional connectivity arises from a slow rhythmic mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2527-35.	7.1	57
78	Predicting Violent Behavior: What Can Neuroscience Add?. Trends in Cognitive Sciences, 2018, 22, 111-123.	7.8	56
79	In vivo detection of microstructural correlates of brain pathology in preclinical and early Alzheimer Disease with magnetic resonance imaging. Neurolmage, 2017, 148, 296-304.	4.2	52
80	Resting-state fMRI in sleeping infants more closely resembles adult sleep than adult wakefulness. PLoS ONE, 2017, 12, e0188122.	2.5	51
81	The Brain's Dark Energy. Science, 2006, 314, 1249-1250.	12.6	49
82	Organization of Propagated Intrinsic Brain Activity in Individual Humans. Cerebral Cortex, 2020, 30, 1716-1734.	2.9	48
83	Unmasking Language Lateralization in Human Brain Intrinsic Activity. Cerebral Cortex, 2016, 26, 1733-1746.	2.9	46
84	Précis of Images of Mind. Behavioral and Brain Sciences, 1995, 18, 327-339.	0.7	44
85	Genetically defined cellular correlates of the baseline brain MRI signal. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9727-E9736.	7.1	43
86	Oxygen Level and LFP in Task-Positive and Task-Negative Areas: Bridging BOLD fMRI and Electrophysiology. Cerebral Cortex, 2016, 26, 346-357.	2.9	41
87	On time delay estimation and sampling error in resting-state fMRI. NeuroImage, 2019, 194, 211-227.	4.2	39
88	Modern Phrenology: Maps of Human Cortical Function. Annals of the New York Academy of Sciences, 1999, 882, 107-118.	3.8	34
89	Parallel hippocampal-parietal circuits for self- and goal-oriented processing. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	32
90	Increased Functional Vascular Response in the Region of a Glioma. Journal of Cerebral Blood Flow and Metabolism, 1998, 18, 148-153.	4.3	31

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91	Brain Nutrition: A Life Span Approach. Annual Review of Nutrition, 2018, 38, 381-399.	10.1	31
92	The Effects of lodinated Contrast Agents on Autoregulation of Cerebral Blood Flow. Stroke, 1974, 5, 155-160.	2.0	30
93	Quantitative Amyloid Imaging Using Image-Derived Arterial Input Function. PLoS ONE, 2015, 10, e0122920.	2.5	30
94	Cerebral hemodynamics and metabolism in postoperative cerebral vasospasm and treatment with hypertensive therapy. Annals of Neurology, 1981, 9, 502-506.	5.3	28
95	Cingulo-opercular control network and disused motor circuits joined in standby mode. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	27
96	Aerobic Glycolysis as a Marker of Tumor Aggressiveness: Preliminary Data in High Grade Human Brain Tumors. Disease Markers, 2015, 2015, 1-11.	1.3	25
97	In vitro or in vivo receptor binding: Where does the truth lie?. Annals of Neurology, 1986, 19, 384-385.	5.3	24
98	Resting state signal latency predicts laterality in pediatric medically refractory temporal lobe epilepsy. Child's Nervous System, 2018, 34, 901-910.	1.1	22
99	Dynamic measurements of local blood flow and metabolism in the study of higher cortical function in humans with positron emission tomography. Annals of Neurology, 1984, 15, 48-49.	5.3	21
100	Principles of crossâ€network communication in human resting state <scp>fMRI</scp> . Scandinavian Journal of Psychology, 2018, 59, 83-90.	1.5	21
101	Human non-REM sleep and the mean global BOLD signal. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2210-2222.	4.3	20
102	Local Perturbations of Cortical Excitability Propagate Differentially Through Large-Scale Functional Networks. Cerebral Cortex, 2020, 30, 3352-3369.	2.9	20
103	Quantitative hemodynamic PET imaging using image-derived arterial input function and a PET/MR hybrid scanner. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 1435-1446.	4.3	19
104	An Intravenous Technique for the Measurement of Cerebral Vascular Extraction Fraction in the Rat. Journal of Cerebral Blood Flow and Metabolism, 1982, 2, 187-196.	4.3	14
105	Parkinson's disease: Metabolic and pharmacological approaches with positron emission tomography. Annals of Neurology, 1984, 15, 131-132.	5.3	13
106	Visual experience sculpts whole-cortex spontaneous infraslow activity patterns through an Arc-dependent mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9952-E9961.	7.1	13
107	A systematic meta-analysis of oxygen-to-glucose and oxygen-to-carbohydrate ratios in the resting human brain. PLoS ONE, 2018, 13, e0204242.	2.5	13
108	Quantitative positron emission tomography reveals regional differences in aerobic glycolysis within the human brain. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2096-2102.	4.3	13

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109	Spatiotemporal relationship between subthreshold amyloid accumulation and aerobic glycolysis in the human brain. Neurobiology of Aging, 2020, 96, 165-175.	3.1	13
110	Electrically coupled inhibitory interneurons constrain long-range connectivity of cortical networks. NeuroImage, 2020, 215, 116810.	4.2	11
111	Mapping visual dominance in human sleep. NeuroImage, 2017, 150, 250-261.	4.2	9
112	[18F]spiroperidol: A radiopharmaceutical for the in vivo study of the dopamine receptor. Annals of Neurology, 1984, 15, 77-78.	5.3	8
113	Law and neuroscience: recommendations submitted to the President's Bioethics Commission. Journal of Law and the Biosciences, 2014, 1, 224-236.	1.6	7
114	Reply to Biskup et al. and Tu et al.: Sex differences in metabolic brain aging. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10634-10635.	7.1	7
115	Chapter 18 The origins of functional brain imaging in humans. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2009, 95, 257-268.	1.8	6
116	The Role of the Human Brain Neuron–Glia–Synapse Composition in Forming Resting-State Functional Connectivity Networks. Brain Sciences, 2021, 11, 1565.	2.3	6
117	Probabilistic flow in brain-wide activity. NeuroImage, 2020, 223, 117321.	4.2	4
118	Peripheral sensory stimulation elicits global slow waves by recruiting somatosensory cortex bilaterally. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118,	7.1	4
119	Dynamic cerebral positron emission tomographic studies. Annals of Neurology, 1984, 15, 46-47.	5.3	3
120	Quantitative Gradient Echo MRI Identifies Dark Matter as a New Imaging Biomarker of Neurodegeneration that Precedes Tissue Atrophy in Early Alzheimer's Disease. Journal of Alzheimer's Disease, 2022, 85, 905-924.	2.6	3
121	Interaction of method and theory in cognitive neuroscience. Behavioral and Brain Sciences, 1995, 18, 372-383.	0.7	2
122	IC-P-100: The ILP: A new tool for evaluating preclinical Alzheimer's disease using volumetric MRI in a single participant. , 2015, 11, P68-P68.		1
123	IC-O1-02: Are early atrophy patterns in autosomal dominant familial Alzheimer's disease gene-dependent?. , 2013, 9, P3-P4.		Ο
124	IC-P-051: Amyloid load increase and cerebral microbleed prevalence differ as a function of the position within the PSEN1 coding sequence. , 2015, 11, P41-P41.		0
125	P2-138: Early frame of PiB and FDG in autosomal dominant Alzheimer's disease: Similarity, discrepancy, and clinical implication. , 2015, 11, P538-P538.		0
126	IC-P-052: Comparison of cerebral glucose metabolism 18 F-FDC, early frames of 11 C-PIB,Âand cerebral blood flow 15 O-H2 O in autosomal dominant Alzheimer's disease. , 2015, 11, P41-P41.		0

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127	P3-175: The ilp: A new tool for evaluating preclinical Alzheimer's disease using volumetric MRI in a single participant. , 2015, 11, P697-P697.		0
128	IC-03-02: Early frame of PiB and FDG in autosomal dominant Alzheimer's disease: Similarity, discrepancy, and clinical implication. , 2015, 11, P8-P9.		0
129	P3-132: Comparison of cerebral glucose metabolism 18 F-FDC, early frames of 11 C-PiB, and cerebral blood flow 15 O-H2 O in autosomal dominant Alzheimer's disease. , 2015, 11, P674-P674.		0
130	O2-01-03: Amyloid load increase and cerebral microbleed prevalence differ as a function of the position of the mutation within the PSEN1 coding sequence. , 2015, 11, P172-P172.		0
131	O5-06-06: Age-related decreases in tracer influx rate measured with PiB PET. , 2015, 11, P330-P330.		0
132	[ICâ€Pâ€057]: CLINICAL RISK RELATED TO CEREBRAL MICROHEMORRHAGES IN AUTOSOMAL DOMINANT ALZHEIMER'S DISEASE: LONGITUDINAL RESULTS FROM THE DIAN STUDY. Alzheimer's and Dementia, 2017, 13, P47.	0.8	0
133	[P2–372]: UTILITY OF PERFUSION PET MODELS AS MEASURES OF NEURODEGENERATION IN AN AUTOSOMAL DOMINANT ALZHEIMER'S DISEASE POPULATION: REPORT FROM THE DIAN STUDY. Alzheimer's and Dementia, 2017, 13, P768.	0.8	0
134	[ICâ€Pâ€054]: EXAMINING LONGITUDINAL NEUROIMAGING PATTERNS IN AUTOSOMAL DOMINANT ALZHEIMER DISEASE: RESULTS FROM THE DOMINANTLY INHERITED ALZHEIMER NETWORK. Alzheimer's and Dementia, 2017, 13, P44.	0.8	0
135	[ICâ€Pâ€064]: BRAIN AEROBIC GLYCOLYSIS AND AD PATHOLOGY BIOMARKERS IN AUTOSOMAL DOMINANT AD. Alzheimer's and Dementia, 2017, 13, P53.	0.8	0
136	[ICâ€Pâ€166]: UTILITY OF PERFUSION PET MODELS AS MEASURE OF NEURODEGENERATION IN AN AUTOSOMAL DOMINANT ALZHEIMER'S DISEASE POPULATION: REPORT FROM THE DIAN STUDY. Alzheimer's and Dementia, 2017, 13, P125.	0.8	0
137	[ICâ€Pâ€205]: BRAIN AEROBIC GLYCOLYSIS AND TAU DEPOSITION WITH [18F]â€AVâ€1451 PET. Alzheimer's and Dementia, 2017, 13, P149.	^d 0.8	0
138	[P1–402]: BRAIN AEROBIC GLYCOLYSIS AND AD PATHOLOGY BIOMARKERS IN AUTOSOMAL DOMINANT AD. Alzheimer's and Dementia, 2017, 13, P427.	0.8	0
139	[O1–02–03]: EXAMINING LONGITUDINAL NEUROIMAGING PATTERNS IN AUTOSOMAL DOMINANT ALZHEIMI DISEASE: FINDINGS FROM THE DOMINANTLY INHERITED ALZHEIMER NETWORK. Alzheimer's and Dementia, 2017, 13, P186.	ER 0.8	0
140	[O3–09–05]: BRAIN AEROBIC GLYCOLYSIS AND TAU DEPOSITION WITH [18F]â€AVâ€1451 PET. Alzheimer's Dementia, 2017, 13, P922.	and 0.8	0
141	[O1–02–04]: CLINICAL RISK RELATED TO CEREBRAL MICROHEMORRHAGES IN AUTOSOMAL DOMINANT ALZHEIMER's DISEASE: LONGITUDINAL RESULTS FROM THE DIAN STUDY. Alzheimer's and Dementia, 2017, 13, P186.	0.8	0
142	ICâ€₽â€131: PIB BINDING TOPOGRAPHY BEST CORRELATES WITH YOUNG ADULT GLYCOLYSIS. Alzheimer's and Dementia, 2019, 15, P108.	0.8	0