

**Supplemental Table: The 100 most mentioned neuroimaging articles ranked in order of the Altmetric Attention Score**

Ranking	Article	Altmetric Attention Score	Number of Citations (1980-2018)
1	Soares de Oliveira-Szejnfeld P, et al. Congenital brain abnormalities and Zika virus: what the radiologist can expect to see prenatally and postnatally. <i>Radiology</i> 2016;281(1):203-218	1467	80
2	De Fatima Vasco Aragao M, et al. Clinical features and neuroimaging (CT and MRI) findings in presumed Zika virus related congenital infection and microcephaly: retrospective case series study. <i>BMJ</i> 2016;13;353:i1901	1249	68
3	Hougaard A, et al. Evidence of a Christmas spirit network in the brain: functional MRI study. <i>BMJ</i> 2015;351:h6266	1127	1
4	Cook PF, et al. Awake canine fMRI predicts dogs' preference for praise versus food. <i>Soc Cogn Affect Neurosci</i> 2016;11(12):1853-1862	1124	5
5	Roberts DR, et al. Effects of spaceflight on astronaut brain structure as indicated on MRI. <i>N Engl J Med</i> 2017;377(18):1746-1753	937	4
6	Tan A, et al. The human hippocampus is not sexually-dimorphic: meta-analysis of structural MRI volumes. <i>Neuroimage</i> 2016;124:350-366	874	23
7	Raichlen DA, et al. Differences in resting state functional connectivity between young adult endurance athletes and healthy controls. <i>Front Hum Neurosci</i> 2016;10:610	816	6
8	Amen DG, et al. Discriminative properties of hippocampal hypoperfusion in marijuana users compared to healthy controls: implications for marijuana administration in Alzheimer's dementia. <i>J Alzheimers Dis</i> 2017;56(1):261-273	805	0
9	Rodriguez P, et al. Multimodal randomized functional MR imaging of the effects of methylene blue in the human brain. <i>Radiology</i> 2016;281(2):516-526	716	7

10	Hayes SM, et al. FMRI activity during associative encoding is correlated with cardiorespiratory fitness and source memory performance in older adults. <i>Cortex</i> 2017;91:208-220	692	3
11	Amen DG, et al. Gender-based cerebral perfusion differences in 46,034 functional neuroimaging scans. <i>J Alzheimers Dis</i> 2017;60(2):605-614	667	0
12	Arnold DL, et al. Superior MRI outcomes with alemtuzumab compared with subcutaneous interferon $\beta$ -1a in MS. <i>Neurology</i> 2016;87(14):1464-1472	615	6
13	Lodygensky GA, et al. Toward quantitative MRI analysis: a smart approach to characterize neonatal white matter injury. <i>Neurology</i> 2017;88(7):610-611	607	0
14	Creswell JD, et al. Alterations in resting state functional connectivity link mindfulness meditation with reduced interleukin-6: a randomized controlled trial. <i>Biol Psychiatry</i> 2016;80(1):53-61	605	27
15	Liu TT, et al. Magnetic resonance perfusion image features uncover an angiogenic subgroup of glioblastoma patients with poor survival and better response to antiangiogenic treatment. <i>Neuro Oncol</i> 2017;19(7):997-1007	596	4
16	Royet JP, et al. The neural bases of disgust for cheese: an fMRI study. <i>Front Hum Neurosci</i> 2016;10:511	575	2
17	Bos D, et al. Prevalence, clinical management, and natural course of incidental findings on brain MR images: the population-based Rotterdam scan study. <i>Radiology</i> 2016;281(2):507-515	547	11
18 <sup>a</sup>	Wager TD, et al. An fMRI-based neurologic signature of physical pain. <i>N Engl J Med</i> 2013;368(15):1388-1397	533	351
18 <sup>a</sup>	Hepp DH, et al. Loss of functional connectivity in patients with Parkinson disease and visual hallucinations. <i>Radiology</i> 2017;285(3):896-903	533	1
20	Godwin CA, et al. Functional connectivity within and between intrinsic networks correlates with trait mind wandering. <i>Neuropsychologia</i> 2017;103:140-153	523	0
21	Xu KZ, et al. Neural basis of cognitive control over movement inhibition: human fMRI and	513	1

	primate electrophysiology evidence. <i>Neuron</i> 2017;96(6):1447-1458.e6		
22	Harper DE, et al. Resting functional connectivity of the periaqueductal gray is associated with normal inhibition and pathological facilitation in conditioned pain modulation. <i>J Pain</i> 2018;19(6):635.e1-635.e15	491	0
23	Pottala JV, et al. Higher RBC EPA + DHA corresponds with larger total brain and hippocampal volumes WHIMS-MRI Study. <i>Neurology</i> 2014;82(5):435-442	488	49
24	Zeinab Barati, et al. Functional near-infrared spectroscopy study on tonic pain activation by cold pressor test. <i>Neurophotronics</i> 2017;4(1):015004	486	1
25	Ruigrok AN, et al. A meta-analysis of sex differences in human brain structure. <i>Neurosci Biobehav Rev</i> 2014;39:34-50	479	182
26	Tang S, et al. Central nervous system changes induced by underbody blast-induced hyperacceleration: an in vivo diffusion tensor imaging and magnetic resonance spectroscopy study. <i>J Neurotrauma</i> 2017;34(11):1972-1980	463	1
27	Fischer DB, et al. A human brain network derived from coma-causing brainstem lesions. <i>Neurology</i> 2016;87(23):2427-2434	455	17
28	Levitin DJ, et al. Measuring the representational space of music with fMRI: a case study with Sting. <i>Neurocase</i> 2016;22(6):548-557	453	1
29	He BJ, et al. The fMRI signal, slow cortical potential and consciousness. <i>Trends Cogn Sci</i> 2009;13(7):302-309	434	166
30	Maguire EA, et al. London taxi drivers and bus drivers: a structural MRI and neuropsychological analysis. <i>Hippocampus</i> 2006;16(12):1091-1101	406	285
31	Li S, et al. Reduced integrity of right lateralized white matter in patients with primary insomnia: a diffusion-tensor imaging study. <i>Radiology</i> 2016;280(2):520-528	374	10
32	Stender J, et al. Diagnostic precision of PET imaging and functional MRI in disorders of	367	88

	consciousness: a clinical validation study. <i>Lancet</i> 2014;384(9942):514-522		
33	Desai J, et al. Reduced perfusion in Broca's area in developmental stuttering. <i>Hum Brain Mapp</i> 2017;38(4):1865-1874	365	4
34	Fischer K, et al. Biomarker profiling by nuclear magnetic resonance spectroscopy for the prediction of all-cause mortality: an observational study of 17,345 persons. <i>PLoS Med</i> 2014;11(2):e1001606	362	86
35	De Giglio L, et al. Multiple sclerosis: changes in thalamic resting-state functional connectivity induced by a home-based cognitive rehabilitation program. <i>Radiology</i> 2016;280(1):202-311	343	11
36	Sprooten E, et al. Addressing reverse inference in psychiatric neuroimaging: meta-analyses of task-related brain activation in common mental disorders. <i>Hum Brain Mapp</i> 2017;38(4):1846-1864	334	11
37	Smith AM, et al. Voluntary out-of-body experience: an fMRI study. <i>Front Hum Neurosci</i> 2014;8:70	325	6
38	Goldstein RZ, et al. Dysfunction of the prefrontal cortex in addiction: neuroimaging findings and clinical implications. <i>Nat Rev Neurosci</i> 2011;12(11):652-669	324	722
39	Spann MN, et al. Maternal immune activation during the third trimester is associated with neonatal functional connectivity of the salience network and fetal to toddler behavior. <i>J Neurosci</i> 2018;38(11):2877-2886	307	1
40	Filbey FM, et al. fMRI study of neural sensitization to hedonic stimuli in long-term, daily cannabis users. <i>Hum Brain Mapp</i> 2016;37(10):3431-3443	306	11
41	Jiang H, et al. Brain activity and functional connectivity associated with hypnosis. <i>Cereb Cortex</i> 2017;27(8):4083-4093	295	9
42 <sup>a</sup>	Acevedo BP, et al. The highly sensitive brain: an fMRI study of sensory processing sensitivity and response to others' emotions. <i>Brain Behav</i> 2014;4(4):580-594	292	29
42 <sup>a</sup>	Carhart-Harris RL, et al. The entropic brain: a theory of conscious states informed by neuroimaging research with psychedelic drugs. <i>Front Hum Neurosci</i> 2014;8:20	292	100

44	Gordon EM, et al. Precision functional mapping of individual human brains. <i>Neuron</i> 2017;95(4):791-807.e7	289	19
45	Song H, et al. Love-related changes in the brain: a resting-state functional magnetic resonance imaging study. <i>Front Hum Neurosci</i> 2015;9:71	274	13
46	Boecker H, et al. The runner's high: opioidergic mechanisms in the human brain. <i>Cereb Cortex</i> 2008;18(11):2523-2531	268	165
47	El Marroun H, et al. Prenatal cannabis and tobacco exposure in relation to brain morphology: a prospective neuroimaging study in young children. <i>Biol Psychiatry</i> 2016;79(12):971-979	260	8
48	Masterson TD, et al. Neural reactivity to visual food stimuli is reduced in some areas of the brain during evening hours compared to morning hours: an fMRI study in women. <i>Brain Imaging Behav</i> 2016;10(1):68-78	255	5
49	Szaflarski JP, et al. Practice guideline summary: use of fMRI in the presurgical evaluation of patients with epilepsy report of the guideline development, dissemination, and implementation subcommittee of the American academy of neurology. <i>Neurology</i> 2017;88(4):395-402	253	19
50	Curtis BJ, et al. Sleep duration and resting fMRI functional connectivity: examination of short sleepers with and without perceived daytime dysfunction. <i>Brain Behav</i> 2016;6(12):e00576	252	3
51	Chirles TJ, et al. Exercise training and functional connectivity changes in mild cognitive impairment and healthy elders. <i>J Alzheimers Dis</i> 2017;57(3):845-856	249	6
52	Schöll M, et al. PET imaging of tau deposition in the aging human brain. <i>Neuron</i> 2016;89(5):971-982	247	150
53	Poldrack RA, et al. Scanning the horizon: towards transparent and reproducible neuroimaging research. <i>Nat Rev Neurosci</i> 2017;18(2):115-126	243	76
54	Krause AJ, et al. The sleep-deprived human brain. <i>Nat Rev Neurosci</i> 2017;18(7):404-418.	239	12
55	Keynan JN, et al. Limbic activity modulation guided by fMRI-inspired EEG improves implicit	232	12

	emotion regulation. <i>Biol Psychiatry</i> 2016;80(6):490-496		
56	Soon CS, et al. Unconscious determinants of free decisions in the human brain. <i>Nat Neurosci</i> 2008;11(5):543-545	223	1
57	Moore E, et al. Diffusion tensor MRI tractography reveals increased fractional anisotropy (FA) in arcuate fasciculus following music-cued motor training. <i>Brain Cogn</i> 2017;116:40-46	218	1
58	Carhart-Harris RL, et al. The effect of acutely administered MDMA on subjective and BOLD-fMRI responses to favourite and worst autobiographical memories. <i>Int J Neuropsychopharmacol</i> 2014;17(4):527-540	216	21
59	Schoenmakers S, et al. Linear reconstruction of perceived images from human brain activity. <i>Neuroimage</i> 2013;83:951-961	208	24
60	Lindbergh CA, et al. Relationship of lutein and zeaxanthin levels to neurocognitive functioning: an fMRI Study of older adults. <i>J Int Neuropsychol Soc</i> 2017;23(1):11-22	206	9
61	Miyawaki Y, et al. Visual image reconstruction from human brain activity using a combination of multiscale local image decoders. <i>Neuron</i> 2008;60(5):915-929	205	199
62	Felger JC, et al. Inflammation is associated with decreased functional connectivity within corticostriatal reward circuitry in depression. <i>Mol Psychiatry</i> 2016;21(10):1358-1365	200	34
63	Lim S, et al. Preferential detachment during human brain development: age- and sex-specific structural connectivity in diffusion tensor imaging (DTI) data. <i>Cereb Cortex</i> 2015;25(6):1477-1489	192	26
64	Silveri MM, et al. Citicoline enhances frontal lobe bioenergetics as measured by phosphorus magnetic resonance spectroscopy. <i>NMR Biomed</i> 2008;21(10):1066-1075	191	27
65	Manning KY, et al. Multiparametric MRI changes persist beyond recovery in concussed adolescent hockey players. <i>Neurology</i> 2017;89(21):2157-2166	188	3
66	Tsvetanov KA, et al. The effect of ageing on fMRI: correction for the confounding effects of vascular reactivity evaluated by joint fMRI and MEG in 335 adults. <i>Hum Brain</i>	187	38

	<i>Mapp</i> 2015;36(6):2248-2269		
67 <sup>a</sup>	Sasaki T, et al. Hockey concussion education project, part 3. White matter microstructure in ice hockey players with a history of concussion: a diffusion tensor imaging study. <i>J Neurosurg</i> 2014;120(4):882-890	184	0
67 <sup>a</sup>	Rippon G, et al. Recommendations for sex/gender neuroimaging research: key principles and implications for research design, analysis, and interpretation. <i>Front Hum Neurosci</i> 2014;8:650	184	30
69 <sup>a</sup>	Spalek K, et al. Sex-dependent dissociation between emotional appraisal and memory: a large-scale behavioral and fMRI Study. <i>J Neurosci</i> 2015;35(3):920-935	182	12
69 <sup>a</sup>	Dubois J, et al. Building a science of individual differences from fMRI. <i>Trends Cogn Sci</i> 2016;20(6):425-443	182	60
71 <sup>a</sup>	Rosenberg J, et al. Early to bed, early to rise? Diffusion tensor imaging identifies chronotype-specificity. <i>Neuroimage</i> 2014;84:428-434	178	21
71 <sup>a</sup>	Wenger E, et al. Expansion and renormalization of human brain structure during skill acquisition. <i>Trends Cogn Sci</i> 2017;21(12):930-939	178	2
73 <sup>a</sup>	Ware JB, et al. Combat-related mild traumatic brain injury: association between baseline diffusion-tensor imaging findings and long-term outcomes. <i>Radiology</i> 2016;280(1):212-219	176	7
73 <sup>a</sup>	Haas BW, et al. The tendency to trust is reflected in human brain structure. <i>Neuroimage</i> 2015;107:175-181	176	10
75 <sup>a</sup>	Hyde DC, et al. Functional organization of the temporal-parietal junction for theory of mind in preverbal infants: a near-infrared spectroscopy study. <i>J Neurosci</i> 2018;38(18):4264-4274	173	0
75 <sup>a</sup>	Bowman GL, et al. Nutrient biomarker patterns, cognitive function, and MRI measures of brain aging. <i>Neurology</i> 2012;78(4):241-249	173	76
77	Fox KC, et al. Is meditation associated with altered brain structure? A systematic review and meta-analysis of morphometric neuroimaging in meditation practitioners. <i>Neurosci Biobehav</i>	171	118

	Rev 2014;43:48-73		
78	Cogoni C, et al. Reduced empathic responses for sexually objectified women: an fMRI investigation. <i>Cortex</i> 2018;99:258-272	169	1
79 <sup>a</sup>	Molenberghs P, et al. The neural correlates of justified and unjustified killing: an fMRI study. <i>Soc Cogn Affect Neurosci</i> 2015;10(10):1397-1404	166	7
79 <sup>a</sup>	Huth AG, et al. A continuous semantic space describes the representation of thousands of object and action categories across the human brain. <i>Neuron</i> 2012;76(6):1210-1224	166	220
81 <sup>a</sup>	Decety J, et al. An fMRI study of affective perspective taking in individuals with psychopathy: imagining another in pain does not evoke empathy. <i>Front Hum Neurosci</i> 2013;7:489	164	97
81 <sup>a</sup>	Jenkins LM, et al. Shared white matter alterations across emotional disorders: a voxel-based meta-analysis of fractional anisotropy. <i>Neuroimage Clin</i> 2016;12:1022-1034	164	4
83	Hibar DP, et al. Cortical abnormalities in bipolar disorder: an MRI analysis of 6503 individuals from the ENIGMA bipolar disorder working group. <i>Mol Psychiatry</i> 2018;23(4):932-942	162	2
84 <sup>a</sup>	Jack AI, et al. fMRI reveals reciprocal inhibition between social and physical cognitive domains. <i>Neuroimage</i> 2013;66:385-401	159	49
84 <sup>a</sup>	Koike T, et al. Neural substrates of shared attention as social memory: a hyperscanning functional magnetic resonance imaging study. <i>Neuroimage</i> 2016;125:401-412	159	10
86 <sup>a</sup>	Rosenberg MD, et al. A neuromarker of sustained attention from whole-brain functional connectivity. <i>Nat Neurosci</i> 2016;19(1):165-171	157	91
86 <sup>a</sup>	Paech D, et al. T1p-weighted dynamic glucose-enhanced MR Imaging in the human brain. <i>Radiology</i> 2017;285(3):914-922	157	0
88 <sup>a</sup>	Karns CM, et al. The cultivation of pure altruism via gratitude: a functional MRI study of change with gratitude practice. <i>Front Hum Neurosci</i> 2017;11:599	156	2
88 <sup>a</sup>	Jaillard A, et al. Pain, heat, and emotion with functional MRI. <i>N Engl J Med</i> 2013; 368(15):1447-	156	3



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90 <sup>a</sup>	Schnyer DM, et al. Evaluating the diagnostic utility of applying a machine learning algorithm to diffusion tensor MRI measures in individuals with major depressive disorder. <i>Psychiatry Res Neuroimaging</i> 2017;264:1-9	153	2
90 <sup>a</sup>	Schweizer TA, et al. Brain activity during driving with distraction: an immersive fMRI study. <i>Front Hum Neurosci</i> 2013;7:53	153	30
92 <sup>a</sup>	Pasternak O, et al. Hockey concussion education project, part 2. Microstructural white matter alterations in acutely concussed ice hockey players: a longitudinal free-water MRI study. <i>J Neurosurg</i> 2014;120(4):873-881	152	0
92 <sup>a</sup>	Tiwari P, et al. Computer-extracted texture features to distinguish cerebral radionecrosis from recurrent brain tumors on multiparametric MRI: a feasibility study. <i>AJNR Am J Neuroradiol</i> 2016;37(12):2231-2236	152	8
92 <sup>a</sup>	Shan ZY, et al. Brain function characteristics of chronic fatigue syndrome: a task fMRI study. <i>Neuroimage Clin</i> 2018;19:279-286	152	0
92 <sup>a</sup>	Chamberlain R, et al. Drawing on the right side of the brain: a voxel-based morphometry analysis of observational drawing. <i>Neuroimage</i> 2014;96:167-173	152	10
96	Grotheer M, et al. Neuroimaging evidence of a bilateral representation for visually presented numbers. <i>J Neurosci</i> 2016;36(1):88-97	151	18
97	Bakker A, et al. Response of the medial temporal lobe network in amnesic mild cognitive impairment to therapeutic intervention assessed by fMRI and memory task performance. <i>Neuroimage Clin</i> 2015;7:688-698	150	43
98	Dresler M, et al. Neural correlates of dream lucidity obtained from contrasting lucid versus non-lucid REM sleep: a combined EEG/fMRI case study. <i>Sleep</i> 2012;35(7):1017-1020	147	61
99	Roxana G, et al. Functional MRI of disease progression in Parkinson disease and atypical parkinsonian syndromes. <i>Neurology</i> 2016;87(7):709–717	146	15

100	Staubo SC, et al. Mediterranean diet, micronutrients and macronutrients, and MRI measures of cortical thickness. <i>Alzheimers Dement</i> 2017;13(2):168-177	145	11
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<sup>a</sup>Articles have the same rank because they have an equal number of Altmetric Attention Score