Vivek Prabhakaran

List of Publications by Year in Descending Order

124 papers	7,364 citations	37 h-index	85 g-index
131 ext. papers	8,577 ext. citations	4.9 avg, IF	5.51 L-index

#	Paper	IF	Citations
124	Amyloid deposition on positron emission tomography correlates with severity of perioperative delirium: a case-control pilot study.. *British Journal of Anaesthesia*, **2022**,	5.4	1
123	Insights from the IronTract challenge: Optimal methods for mapping brain pathways from multi-shell diffusion MRI. *NeuroImage*, **2022**, 257, 119327	7.9	1
122	Differences in Diffusion Tensor Imaging White Matter Integrity Related to Verbal Fluency Between Young and Old Adults. *Frontiers in Aging Neuroscience*, **2021**, 13, 750621	5.3	1
121	Ipsilesional Mu Rhythm Desynchronization Correlates With Improvements in Affected Hand Grip Strength and Functional Connectivity in Sensorimotor Cortices Following BCI-FES Intervention for Upper Extremity in Stroke Survivors. *Frontiers in Human Neuroscience*, **2021**, 15, 725645	3.3	0
120	Regional and global resting-state functional MR connectivity in temporal lobe epilepsy: Results from the Epilepsy Connectome Project. *Epilepsy and Behavior*, **2021**, 117, 107841	3.2	5
119	Relationships between preoperative cortical thickness, postoperative electroencephalogram slowing, and postoperative delirium. *British Journal of Anaesthesia*, **2021**, 127, 236-244	5.4	3
118	Network topology of the cognitive phenotypes of temporal lobe epilepsy. *Cortex*, **2021**, 141, 55-65	3.8	1
117	Brain-Computer Interface Training With Functional Electrical Stimulation: Facilitating Changes in Interhemispheric Functional Connectivity and Motor Outcomes Post-stroke. *Frontiers in Neuroscience*, **2021**, 15, 670953	5.1	1
116	Tractography dissection variability: What happens when 42 groups dissect 14 white matter bundles on the same dataset?. *NeuroImage*, **2021**, 243, 118502	7.9	18
115	A Prospective, Multicenter Study to Assess the Safety and Efficacy of Translingual Neurostimulation Plus Physical Therapy for the Treatment of a Chronic Balance Deficit Due to Mild-to-Moderate Traumatic Brain Injury. *Neuromodulation*, **2020**,	3.1	10
114	Cohort study into the neural correlates of postoperative delirium: the role of connectivity and slow-wave activity. *British Journal of Anaesthesia*, **2020**, 125, 55-66	5.4	21
113	Neuroticism in temporal lobe epilepsy is associated with altered limbic-frontal lobe resting-state functional connectivity. *Epilepsy and Behavior*, **2020**, 110, 107172	3.2	5
112	Rethinking Measures of Functional Connectivity via Feature Extraction. *Scientific Reports*, **2020**, 10, 1298	4.9	24
111	Brain aging in temporal lobe epilepsy: Chronological, structural, and functional. *NeuroImage: Clinical*, **2020**, 25, 102183	5.3	11
110	Alterations in brain white matter microstructural properties in patients with Crohnʼs disease in remission. *Scientific Reports*, **2020**, 10, 2145	4.9	5
109	Graph Theory Analysis of Functional Connectivity Combined with Machine Learning Approaches Demonstrates Widespread Network Differences and Predicts Clinical Variables in Temporal Lobe Epilepsy. *Brain Connectivity*, **2020**, 10, 39-50	2.7	16
108	Quantitative definition of neurobehavior, vision, hearing and brain volumes in macaques congenitally exposed to Zika virus. *PLoS ONE*, **2020**, 15, e0235877	3.7	5

107	Postoperative delirium is associated with increased plasma neurofilament light. *Brain*, **2020**, 143, 47-54	11.2	42
106	Network, clinical and sociodemographic features of cognitive phenotypes in temporal lobe epilepsy. *NeuroImage: Clinical*, **2020**, 27, 102341	5.3	15
105	Multi-Channel Deep Neural Network For Temporal Lobe Epilepsy Classification Using Multimodal Mri Data **2020**,		3
104	Quantitative definition of neurobehavior, vision, hearing and brain volumes in macaques congenitally exposed to Zika virus **2020**, 15, e0235877		
103	Quantitative definition of neurobehavior, vision, hearing and brain volumes in macaques congenitally exposed to Zika virus **2020**, 15, e0235877		
102	Quantitative definition of neurobehavior, vision, hearing and brain volumes in macaques congenitally exposed to Zika virus **2020**, 15, e0235877		
101	Quantitative definition of neurobehavior, vision, hearing and brain volumes in macaques congenitally exposed to Zika virus **2020**, 15, e0235877		
100	A pilot study of neural correlates of perioperative executive function associated with noncardiac surgery in the elderly. *British Journal of Anaesthesia*, **2019**, 123, e517-e518	5.4	0
99	A Verbal Fluency Task-Based Brain Activation fMRI Study in Patients with Crohnʼs Disease in Remission. *Journal of Neuroimaging*, **2019**, 29, 630-639	2.8	5
98	Alterations in resting-state functional connectivity in patients with Crohnʼs disease in remission. *Scientific Reports*, **2019**, 9, 7412	4.9	11
97	Ipsilesional Mu Rhythm Desynchronization and Changes in Motor Behavior Following Post Stroke BCI Intervention for Motor Rehabilitation. *Frontiers in Neuroscience*, **2019**, 13, 53	5.1	13
96	Cognitive slowing and its underlying neurobiology in temporal lobe epilepsy. *Cortex*, **2019**, 117, 41-52	3.8	16
95	Using Low-Frequency Oscillations to Detect Temporal Lobe Epilepsy with Machine Learning. *Brain Connectivity*, **2019**, 9, 184-193	2.7	11
94	Neuroanatomical correlates of personality traits in temporal lobe epilepsy: Findings from the Epilepsy Connectome Project. *Epilepsy and Behavior*, **2019**, 98, 220-227	3.2	6
93	Examining the identification of age-related atrophy between T1 and T1 + T2-FLAIR cortical thickness measurements. *Scientific Reports*, **2019**, 9, 11288	4.9	6
92	Network analysis of prospective brain development in youth with benign epilepsy with centrotemporal spikes and its relationship to cognition. *Epilepsia*, **2019**, 60, 1838-1848	6.4	7
91	Translingual Neurostimulation for the Treatment of Chronic Symptoms Due to Mild-to-Moderate Traumatic Brain Injury. *Archives of Rehabilitation Research and Clinical Translation*, **2019**, 1, 100026	1.3	7
90	DUAL-GLOW: Conditional Flow-Based Generative Model for Modality Transfer.. *Proceedings of the IEEE International Conference on Computer Vision*, **2019**, 2019, 10610-10619	3.3	10

89	Effective Connectivity Within the Default Mode Network in Left Temporal Lobe Epilepsy: Findings from the Epilepsy Connectome Project. *Brain Connectivity*, **2019**, 9, 174-183	2.7	12
88	Identification of Subclinical Language Deficit Using Machine Learning Classification Based on Poststroke Functional Connectivity Derived from Low Frequency Oscillations. *Brain Connectivity*, **2019**, 9, 194-208	2.7	2
87	Preoperative FMRI Associated with Decreased Mortality and Morbidity in Brain Tumor Patients. *Interdisciplinary Neurosurgery: Advanced Techniques and Case Management*, **2018**, 13, 40-45	0.5	14
86	Predicting primary outcomes of brain tumor patients with advanced neuroimaging MRI measures.. *Interdisciplinary Neurosurgery: Advanced Techniques and Case Management*, **2018**, 13, 109-118	0.5	1
85	Brain-computer interfaces for stroke rehabilitation: summary of the 2016 BCI Meeting in Asilomar. *Brain-Computer Interfaces*, **2018**, 5, 41-57	2	5
84	Machine Learning Classification to Identify the Stage of Brain-Computer Interface Therapy for Stroke Rehabilitation Using Functional Connectivity. *Frontiers in Neuroscience*, **2018**, 12, 353	5.1	21
83	Abstract WP141: Prediction of Subclinical Language Deficit Using Machine Learning Based on Post-stroke Functional Connectivity Derived From Low Frequency Oscillations. *Stroke*, **2018**, 49,	6.7	1
82	IC-P-161: CHARACTERIZING STRUCTURAL BRAIN ALTERATIONS IN ALZHEIMER'S DISEASE PATIENTS WITH MACHINE LEARNING **2018**, 14, P135-P136		2
81	Behavioral Outcomes Following Brain-Computer Interface Intervention for Upper Extremity Rehabilitation in Stroke: A Randomized Controlled Trial. *Frontiers in Neuroscience*, **2018**, 12, 752	5.1	14
80	Evaluation of Changes in the Motor Network Following BCI Therapy Based on Graph Theory Analysis. *Frontiers in Neuroscience*, **2018**, 12, 861	5.1	5
79	Progressive dissociation of cortical and subcortical network development in children with new-onset juvenile myoclonic epilepsy. *Epilepsia*, **2018**, 59, 2086-2095	6.4	10
78	Early Findings on Functional Connectivity Correlates of Behavioral Outcomes of Brain-Computer Interface Stroke Rehabilitation Using Machine Learning. *Frontiers in Neuroscience*, **2018**, 12, 624	5.1	9
77	Psychomotor slowing is associated with anomalies in baseline and prospective large scale neural networks in youth with epilepsy. *NeuroImage: Clinical*, **2018**, 19, 222-231	5.3	4
76	The Impact of Intracranial Tumor Proximity to White Matter Tracts on Morbidity and Mortality: A Retrospective Diffusion Tensor Imaging Study. *Neurosurgery*, **2017**, 80, 193-200	3.2	11
75	Brain structure and organization five decades after childhood onset epilepsy. *Human Brain Mapping* , **2017**, 38, 3289-3299	5.9	10
74	Investigating the Blood Oxygenation Level-Dependent Functional MRI Response to a Verbal Fluency Task in Early Stroke before and after Hemodynamic Scaling. *Frontiers in Neurology*, **2017**, 8, 283	4.1	4
73	Role of the Contralesional vs. Ipsilesional Hemisphere in Stroke Recovery. *Frontiers in Human Neuroscience*, **2017**, 11, 469	3.3	76
72	Machine Learning-Based Prediction of Changes in Behavioral Outcomes Using Functional Connectivity and Clinical Measures in Brain-Computer Interface Stroke Rehabilitation. *Lecture Notes in Computer Science*, **2017**, 543-557	0.9	

71	Graph theory and cognition: A complementary avenue for examining neuropsychological status in epilepsy. *Epilepsy and Behavior*, **2016**, 64, 329-335	3.2	18
70	Age-Related Changes in BOLD Activation Pattern in Phonemic Fluency Paradigm: An Investigation of Activation, Functional Connectivity and Psychophysiological Interactions. *Frontiers in Aging Neuroscience*, **2016**, 8, 110	5.3	10
69	Differing Patterns of Altered Slow-5 Oscillations in Healthy Aging and Ischemic Stroke. *Frontiers in Human Neuroscience*, **2016**, 10, 156	3.3	13
68	Brain-Computer Interface Training after Stroke Affects Patterns of Brain-Behavior Relationships in Corticospinal Motor Fibers. *Frontiers in Human Neuroscience*, **2016**, 10, 457	3.3	20
67	Structural Imaging Changes and Behavioral Correlates in Patients with Crohnʼs Disease in Remission. *Frontiers in Human Neuroscience*, **2016**, 10, 460	3.3	17
66	Classification and Extraction of Resting State Networks Using Healthy and Epilepsy fMRI Data. *Frontiers in Neuroscience*, **2016**, 10, 440	5.1	20
65	Disruptions in cortico-subcortical covariance networks associated with anxiety in new-onset childhood epilepsy. *NeuroImage: Clinical*, **2016**, 12, 815-824	5.3	6
64	Sa1886 Altered Brain Functional Activation and Connectivity Patterns in Patients With Crohnʼs Disease in Remission. *Gastroenterology*, **2016**, 150, S392	13.3	2
63	Recovery of slow-5 oscillations in a longitudinal study of ischemic stroke patients. *NeuroImage: Clinical*, **2016**, 11, 398-407	5.3	6
62	A review of the progression and future implications of brain-computer interface therapies for restoration of distal upper extremity motor function after stroke. *Expert Review of Medical Devices*, **2016**, 13, 445-54	3.5	65
61	Implication of the Slow-5 Oscillations in the Disruption of the Default-Mode Network in Healthy Aging and Stroke. *Brain Connectivity*, **2016**, 6, 482-95	2.7	13
60	Low functional robustness in mesial temporal lobe epilepsy. *Epilepsy Research*, **2016**, 123, 20-8	3	11
59	Hypercapnic evaluation of vascular reactivity in healthy aging and acute stroke via functional MRI. *NeuroImage: Clinical*, **2016**, 12, 173-9	5.3	12
58	Delineating potential epileptogenic areas utilizing resting functional magnetic resonance imaging (fMRI) in epilepsy patients. *Neurocase*, **2016**, 22, 362-8	0.8	3
57	Disrupted Brain Functional Organization in Epilepsy Revealed by Graph Theory Analysis. *Brain Connectivity*, **2015**, 5, 276-83	2.7	25
56	Regional homogeneity (ReHo) changes in new onset versus chronic benign epilepsy of childhood with centrotemporal spikes (BECTS): A resting state fMRI study. *Epilepsy Research*, **2015**, 116, 79-85	3	35
55	Functional connectivity changes in the language network during stroke recovery. *Annals of Clinical and Translational Neurology*, **2015**, 2, 185-95	5.3	46
54	Cognition and brain development in children with benign epilepsy with centrotemporal spikes. *Epilepsia*, **2015**, 56, 1615-22	6.4	61

53	Age-Related Changes in Inter-Network Connectivity by Component Analysis. *Frontiers in Aging Neuroscience*, **2015**, 7, 237	5.3	12
52	DTI measures track and predict motor function outcomes in stroke rehabilitation utilizing BCI technology. *Frontiers in Human Neuroscience*, **2015**, 9, 195	3.3	59
51	Dose-response relationships using brain-computer interface technology impact stroke rehabilitation. *Frontiers in Human Neuroscience*, **2015**, 9, 361	3.3	23
50	Developmental Reorganization of the Cognitive Network in Pediatric Epilepsy. *PLoS ONE*, **2015**, 10, e0141186	3.7	18
49	Usage of fMRI for pre-surgical planning in brain tumor and vascular lesion patients: task and statistical threshold effects on language lateralization. *NeuroImage: Clinical*, **2015**, 7, 415-23	5.3	28
48	Abstract 6: Resting-state Functional Connectivity Changes After Stroke Rehabilitation Using Closed Loop Neurofeedback. *Stroke*, **2015**, 46,	6.7	2
47	The influence of physiological noise correction on test-retest reliability of resting-state functional connectivity. *Brain Connectivity*, **2014**, 4, 511-22	2.7	50
46	An open science resource for establishing reliability and reproducibility in functional connectomics. *Scientific Data*, **2014**, 1, 140049	8.2	247
45	Case report: post-stroke interventional BCI rehabilitation in an individual with preexisting sensorineural disability. *Frontiers in Neuroengineering*, **2014**, 7, 18		26
44	Changes in functional connectivity correlate with behavioral gains in stroke patients after therapy using a brain-computer interface device. *Frontiers in Neuroengineering*, **2014**, 7, 25		44
43	Characterizing relationships of DTI, fMRI, and motor recovery in stroke rehabilitation utilizing brain-computer interface technology. *Frontiers in Neuroengineering*, **2014**, 7, 31		43
42	Changes in functional brain organization and behavioral correlations after rehabilitative therapy using a brain-computer interface. *Frontiers in Neuroengineering*, **2014**, 7, 26		56
41	Characterizing Recovery of the Human Brain following Stroke: Evidence from fMRI Studies **2014**, 485-506		1
40	Age-related reorganizational changes in modularity and functional connectivity of human brain networks. *Brain Connectivity*, **2014**, 4, 662-76	2.7	140
39	The neural correlates of age effects on verbal-spatial binding in working memory. *Behavioural Brain Research*, **2014**, 266, 146-52	3.4	4
38	The effect of resting condition on resting-state fMRI reliability and consistency: a comparison between resting with eyes open, closed, and fixated. *NeuroImage*, **2013**, 78, 463-73	7.9	247
37	The effect of scan length on the reliability of resting-state fMRI connectivity estimates. *NeuroImage* , **2013**, 83, 550-8	7.9	453
36	Characterizing the relationship between functional MRI-derived measures and clinical outcomes in patients with vascular lesions. *Neurosurgical Focus*, **2013**, 34, E8	4.2	10

35	The role of secondary motor and language cortices in morbidity and mortality: a retrospective functional MRI study of surgical planning for patients with intracranial tumors. *Neurosurgical Focus*, **2013**, 34, E7	4.2	16
34	Association of functional magnetic resonance imaging indices with postoperative language outcomes in patients with primary brain tumors. *Neurosurgical Focus*, **2013**, 34, E6	4.2	27
33	Alterations in regional homogeneity of resting-state brain activity in mesial temporal lobe epilepsy. *Epilepsia*, **2013**, 54, 658-66	6.4	58
32	Characterizing Functional Connectivity Differences in Aging Adults using Machine Learning on Resting State fMRI Data. *Frontiers in Computational Neuroscience*, **2013**, 7, 38	3.5	47
31	Current status and future perspectives of magnetic resonance high-field imaging: a summary. *Neuroimaging Clinics of North America*, **2012**, 22, 373-97, xii	3	10
30	Support vector machine classification and characterization of age-related reorganization of functional brain networks. *NeuroImage*, **2012**, 60, 601-13	7.9	124
29	Age-related differences in test-retest reliability in resting-state brain functional connectivity. *PLoS ONE*, **2012**, 7, e49847	3.7	74
28	Parallel ICA identifies sub-components of resting state networks that covary with behavioral indices. *Frontiers in Human Neuroscience*, **2012**, 6, 281	3.3	19
27	Validating Age-Related Functional Imaging Changes in Verbal Working Memory with Acute Stroke. *Behavioural Neurology*, **2011**, 24, 187-199	3	3
26	Capacity-speed relationships in prefrontal cortex. *PLoS ONE*, **2011**, 6, e27504	3.7	11
25	Effects of hypoperfusion in Alzheimer's disease. *Journal of Alzheimer's Disease*, **2011**, 26 Suppl 3, 123-33	4.3	135
24	Impact of brain tumor location on morbidity and mortality: a retrospective functional MR imaging study. *American Journal of Neuroradiology*, **2011**, 32, 1420-5	4.4	45
23	Validating age-related functional imaging changes in verbal working memory with acute stroke. *Behavioural Neurology*, **2011**, 24, 187-99	3	
22	When less is more and when more is more: The mediating roles of capacity and speed in brain-behavior efficiency. *Intelligence*, **2009**, 37, 207-222	3	75
21	Neural substrates of word generation during stroke recovery: the influence of cortical hypoperfusion. *Behavioural Neurology*, **2007**, 18, 45-52	3	47
20	Testing conclusions from functional imaging of working memory with data from acute stroke. *Behavioural Neurology*, **2007**, 18, 37-43	3	19
19	B-type natriuretic peptide as a marker for heart failure in patients with acute stroke. *Intensive Care Medicine*, **2007**, 33, 1587-93	14.5	30
18	P-FIT and the neuroscience of intelligence: How well does P fit?. *Behavioral and Brain Sciences*, **2007** , 30, 166-167	0.9	6

17	Neural correlates of cognitive efficiency. *NeuroImage*, **2006**, 33, 969-79	7.9	262
16	The role of the prefrontal cortex in the maintenance of verbal working memory: an event-related FMRI analysis. *Neuropsychology*, **2005**, 19, 223-32	3.8	135
15	Neural substrates of mathematical reasoning: A functional magnetic resonance imaging study of neocortical activation during performance of the necessary arithmetic operations test.. *Neuropsychology*, **2001**, 15, 115-127	3.8	121
14	Age differences in prefrontal cortical activity in working memory.. *Psychology and Aging*, **2001**, 16, 371-384	3.6	137
13	Rostrolateral prefrontal cortex involvement in relational integration during reasoning. *NeuroImage*, **2001**, 14, 1136-49	7.9	551
12	Integration of diverse information in working memory within the frontal lobe. *Nature Neuroscience*, **2000**, 3, 85-90	25.5	503
11	Hemispheric asymmetries and individual differences in visual concept learning as measured by functional MRI. *Neuropsychologia*, **2000**, 38, 1316-24	3.2	119
10	Time course of odorant-induced activation in the human primary olfactory cortex. *Journal of Neurophysiology*, **2000**, 83, 537-51	3.2	255
9	Neural activity differs between explicit and implicit learning of artificial grammar strings: An fMRI study. *Cognitive, Affective and Behavioral Neuroscience*, **2000**, 28, 283-292		22
8	Blind smell: brain activation induced by an undetected air-borne chemical. *Brain*, **1999**, 122 (Pt 2), 209-17	11.2	182
7	Load-dependent roles of frontal brain regions in the maintenance of working memory. *NeuroImage*, **1999**, 9, 216-26	7.9	547
6	Striatal activation during acquisition of a cognitive skill.. *Neuropsychology*, **1999**, 13, 564-574	3.8	344
5	Sniffing and smelling: separate subsystems in the human olfactory cortex. *Nature*, **1998**, 392, 282-6	50.4	435
4	Odorant-induced and sniff-induced activation in the cerebellum of the human. *Journal of Neuroscience*, **1998**, 18, 8990-9001	6.6	174
3	Neural substrates of fluid reasoning: an fMRI study of neocortical activation during performance of the Raven's Progressive Matrices Test. *Cognitive Psychology*, **1997**, 33, 43-63	3.1	415
2	A method for functional magnetic resonance imaging of olfaction. *Journal of Neuroscience Methods*, **1997**, 78, 115-23	3	67
1	Genetic influence on resting state networks in young male and female adults		1