Gopikrishna Deshpande

List of Publications by Year
in descending order

129 papers	4,937 citations	81900 39 h-index	110387 64 g-index
134 all docs	134 docs citations	134 times ranked	5536 citing authors

#	Article	IF	Citations
1	Multivariate Granger causality analysis of fMRI data. Human Brain Mapping, 2009, 30, 1361-1373.	3.6	237
2	Art for reward's sake: Visual art recruits the ventral striatum. NeuroImage, 2011, 55, 420-433.	4.2	236
3	Instantaneous and causal connectivity in resting state brain networks derived from functional MRI data. NeuroImage, 2011, 54, 1043-1052.	4.2	180
4	Effect of hemodynamic variability on Granger causality analysis of fMRI. NeuroImage, 2010, 52, 884-896.	4.2	169
5	Effective connectivity during haptic perception: A study using Granger causality analysis of functional magnetic resonance imaging data. NeuroImage, 2008, 40, 1807-1814.	4.2	167
6	Dual pathways for haptic and visual perception of spatial and texture information. NeuroImage, 2011, 57, 462-475.	4.2	143
7	Identification of neural connectivity signatures of autism using machine learning. Frontiers in Human Neuroscience, 2013, 7, 670.	2.0	142
8	Investigating Effective Brain Connectivity from fMRI Data: Past Findings and Current Issues with Reference to Granger Causality Analysis. Brain Connectivity, 2012, 2, 235-245.	1.7	124
9	Activation and Effective Connectivity Changes Following Explicit-Memory Training for Face–Name Pairs in Patients With Mild Cognitive Impairment. Neurorehabilitation and Neural Repair, 2011, 25, 210-222.	2.9	122
10	Fully Connected Cascade Artificial Neural Network Architecture for Attention Deficit Hyperactivity Disorder Classification From Functional Magnetic Resonance Imaging Data. IEEE Transactions on Cybernetics, 2015, 45, 2668-2679.	9.5	121
11	Multimodal neuroimaging based classification of autism spectrum disorder using anatomical, neurochemical, and white matter correlates. Cortex, 2015, 66, 46-59.	2.4	113
12	Behavioral Relevance of the Dynamics of the Functional Brain Connectome. Brain Connectivity, 2014, 4, 741-759.	1.7	105
13	Dynamic brain connectivity is a better predictor of PTSD than static connectivity. Human Brain Mapping, 2017, 38, 4479-4496.	3.6	102
14	Hemodynamic response function (HRF) variability confounds resting–state fMRI functional connectivity. Magnetic Resonance in Medicine, 2018, 80, 1697-1713.	3.0	101
15	Assessing and Compensating for Zero-Lag Correlation Effects in Time-Lagged Granger Causality Analysis of fMRI. IEEE Transactions on Biomedical Engineering, 2010, 57, 1446-1456.	4.2	89
16	Object familiarity modulates effective connectivity during haptic shape perception. NeuroImage, 2010, 49, 1991-2000.	4.2	89
17	Posteromedial Parietal Cortical Activity and Inputs Predict Tactile Spatial Acuity. Journal of Neuroscience, 2007, 27, 11091-11102.	3.6	84
18	Altered local coherence in the default mode network due to sevoflurane anesthesia. Brain Research, 2010, 1318, 110-121.	2.2	84

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19	Compromised hippocampusâ€striatum pathway as a potential imaging biomarker of mildâ€traumatic brain injury and posttraumatic stress disorder. Human Brain Mapping, 2017, 38, 2843-2864.	3.6	81
20	Integrated local correlation: A new measure of local coherence in fMRI data. Human Brain Mapping, 2009, 30, 13-23.	3.6	76
21	Effective connectivity during episodic memory retrieval in schizophrenia participants before and after antipsychotic medication. Human Brain Mapping, 2015, 36, 1442-1457.	3.6	72
22	Neural processing underlying tactile microspatial discrimination in the blind: A functional magnetic resonance imaging study. Journal of Vision, 2008, 8, 13-13.	0.3	70
23	Brain Networks Shaping Religious Belief. Brain Connectivity, 2014, 4, 140115093509009.	1.7	67
24	Threat-related learning relies on distinct dorsal prefrontal cortex network connectivity. NeuroImage, 2014, 102, 904-912.	4.2	66
25	Early life trauma and directional brain connectivity within major depression. Human Brain Mapping, 2014, 35, 4815-4826.	3.6	61
26	Fluid Intelligence Allows Flexible Recruitment of the Parieto-Frontal Network in Analogical Reasoning. Frontiers in Human Neuroscience, 2011, 5, 22.	2.0	60
27	Diffusion of responsibility attenuates altruistic punishment: A functional magnetic resonance imaging effective connectivity study. Human Brain Mapping, 2016, 37, 663-677.	3.6	59
28	Nonparametric Hemodynamic Deconvolution of fMRI Using Homomorphic Filtering. IEEE Transactions on Medical Imaging, 2015, 34, 1155-1163.	8.9	57
29	Recursive Cluster Elimination Based Support Vector Machine for Disease State Prediction Using Resting State Functional and Effective Brain Connectivity. PLoS ONE, 2010, 5, e14277.	2.5	57
30	Neural Changes with Tactile Learning Reflect Decision-Level Reweighting of Perceptual Readout. Journal of Neuroscience, 2013, 33, 5387-5398.	3.6	54
31	Functional MRI of the Olfactory System in Conscious Dogs. PLoS ONE, 2014, 9, e86362.	2.5	53
32	Influence of Early Life Stress on Intra- and Extra-Amygdaloid Causal Connectivity. Neuropsychopharmacology, 2015, 40, 1782-1793.	5.4	52
33	Effective connectivity of the multiplication network: A functional MRI and multivariate granger causality mapping study. Human Brain Mapping, 2011, 32, 1419-1431.	3.6	51
34	Supervised machine learning for diagnostic classification from large-scale neuroimaging datasets. Brain Imaging and Behavior, 2020, 14, 2378-2416.	2.1	51
35	Fronto-parietal regulation of media violence exposure in adolescents: a multi-method study. Social Cognitive and Affective Neuroscience, 2011, 6, 537-547.	3.0	49
36	Altered Causal Connectivity of Resting State Brain Networks in Amnesic MCI. PLoS ONE, 2014, 9, e88476.	2.5	48

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37	Identifying disease foci from static and dynamic effective connectivity networks: Illustration in soldiers with trauma. Human Brain Mapping, 2018, 39, 264-287.	3.6	47
38	Diagnostic prediction of autism spectrum disorder using complex network measures in a machine learning framework. Biomedical Signal Processing and Control, 2020, 62, 102099.	5.7	47
39	Spatial imagery in haptic shape perception. Neuropsychologia, 2014, 60, 144-158.	1.6	44
40	Functional connectivity of the left and right hippocampi: Evidence for functional lateralization along the long-axis using meta-analytic approaches and ultra-high field functional neuroimaging. NeuroImage, 2016, 135, 64-78.	4.2	43
41	A Neural Basis for the Acquired Capability for Suicide. Frontiers in Psychiatry, 2016, 7, 125.	2.6	42
42	Patterns of effective connectivity during memory encoding and retrieval differ between patients with mild cognitive impairment and healthy older adults. NeuroImage, 2016, 124, 997-1008.	4.2	42
43	Functional Connectivity-Based Prediction of Autism on Site Harmonized ABIDE Dataset. IEEE Transactions on Biomedical Engineering, 2021, 68, 3628-3637.	4.2	42
44	Hemodynamic variability in soldiers with trauma: Implications for functional MRI connectivity studies. NeuroImage: Clinical, 2017, 16, 409-417.	2.7	40
45	Aberrant hemodynamic responses in autism: Implications for resting state fMRI functional connectivity studies. NeuroImage: Clinical, 2018, 19, 320-330.	2.7	40
46	PHASE SYNCHRONIZATION IN BRAIN NETWORKS DERIVED FROM CORRELATION BETWEEN PROBABILITIES OF RECURRENCES IN FUNCTIONAL MRI DATA. International Journal of Neural Systems, 2013, 23, 1350003.	5.2	39
47	Effective connectivity within a triple network brain system discriminates schizophrenia spectrum disorders from psychotic bipolar disorder at the single-subject level. Schizophrenia Research, 2019, 214, 24-33.	2.0	39
48	Functional connectivity of specific resting-state networks predicts trust and reciprocity in the trust game. Cognitive, Affective and Behavioral Neuroscience, 2019, 19, 165-176.	2.0	37
49	Effective connectivity of brain regions underlying third-party punishment: Functional MRI and Granger causality evidence. Social Neuroscience, 2017, 12, 124-134.	1.3	34
50	Altered directional connectivity between emotion network and motor network in Parkinson's disease with depression. Medicine (United States), 2016, 95, e4222.	1.0	33
51	Separate brain areas for processing human and dog faces as revealed by awake fMRI in dogs (Canis) Tj ETQq1 1 0.784314 rgBT /Overl	1.0	32
52	Functional Magnetic Resonance Imaging of the Domestic Dog: Research, Methodology, and Conceptual Issues. Comparative Cognition and Behavior Reviews, 2016, 11, 63-82.	2.0	31
53	Advice Taking from Humans and Machines: An fMRI and Effective Connectivity Study. Frontiers in Human Neuroscience, 2016, 10, 542.	2.0	31
54	Enhancement of Odor-Induced Activity in the Canine Brain by Zinc Nanoparticles: A Functional MRI Study in Fully Unrestrained Conscious Dogs. Chemical Senses, 2016, 41, 53-67.	2.0	31

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55	Engagement of the left extrastriate body area during body-part metaphor comprehension. Brain and Language, 2017, 166, 1-18.	1.6	25
56	Anterior–posterior dissociation of the default mode network in dogs. Brain Structure and Function, 2015, 220, 1063-1076.	2.3	24
57	Psychosocial stress reactivity is associated with decreased whole-brain network efficiency and increased amygdala centrality.. Behavioral Neuroscience, 2018, 132, 561-572.	1.2	24
58	Examining Microstructural White Matter in Active Duty Soldiers with a History of Mild Traumatic Brain Injury and Traumatic Stress. Open Neuroimaging Journal, 2017, 11, 46-57.	0.2	24
59	An fMRI and effective connectivity study investigating miss errors during advice utilization from human and machine agents. Social Neuroscience, 2017, 12, 570-581.	1.3	23
60	A New Generation of Brain-Computer Interfaces Driven by Discovery of Latent EEG-fMRI Linkages Using Tensor Decomposition. Frontiers in Neuroscience, 2017, 11, 246.	2.8	23
61	Dynamics of Segregation and Integration in Directional Brain Networks: Illustration in Soldiers With PTSD and Neurotrauma. Frontiers in Neuroscience, 2019, 13, 803.	2.8	23
62	Predicting Purchase Decisions Based on Spatio-Temporal Functional MRI Features Using Machine Learning. IEEE Transactions on Autonomous Mental Development, 2015, 7, 248-255.	1.6	22
63	Experimental Validation of Dynamic Granger Causality for Inferring Stimulus-Evoked Sub-100 ms Timing Differences from fMRI. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 539-546.	4.9	22
64	Hemodynamic response function parameters obtained from resting-state functional MRI data in soldiers with trauma. Data in Brief, 2017, 14, 558-562.	1.0	21
65	FMRI hemodynamic response function (HRF) as a novel marker of brain function: applications for understanding obsessive-compulsive disorder pathology and treatment response. Brain Imaging and Behavior, 2021, 15, 1622-1640.	2.1	20
66	Investigating the Correspondence of Clinical Diagnostic Grouping With Underlying Neurobiological and Phenotypic Clusters Using Unsupervised Machine Learning. Frontiers in Applied Mathematics and Statistics, 2018, 4, .	1.3	18
67	Exploring the Neurocircuitry Underpinning Predictability of Threat in Soldiers with PTSD Compared to Deployment Exposed Controls. Open Neuroimaging Journal, 2016, 10, 111-124.	0.2	18
68	Tissue specificity of nonlinear dynamics in baseline fMRI. Magnetic Resonance in Medicine, 2006, 55, 626-632.	3.0	17
69	Characterization of Structural Connectivity of the Default Mode Network in Dogs using Diffusion Tensor Imaging. Scientific Reports, 2016, 6, 36851.	3.3	17
70	Olfactory Network Differences in Master Sommeliers: Connectivity Analysis Using Granger Causality and Graph Theoretical Approach. Brain Connectivity, 2017, 7, 123-136.	1.7	17
71	Investigating Focal Connectivity Deficits in Alzheimer's Disease Using Directional Brain Networks Derived from Resting-State fMRI. Frontiers in Aging Neuroscience, 2017, 9, 211.	3.4	17
72	Can Patel's Ï„ accurately estimate directionality of connections in brain networks from fMRI?. Magnetic Resonance in Medicine, 2017, 78, 2003-2010.	3.0	16

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73	Investigating Brain Connectomic Alterations in Autism Using the Reproducibility of Independent Components Derived from Resting State Functional MRI Data. Frontiers in Neuroscience, 2017, 11, 459.	2.8	16
74	Directional brain networks underlying OM chanting. Asian Journal of Psychiatry, 2018, 37, 20-25.	2.0	16
75	Comparing pet and detection dogs (Canis familiaris) on two aspects of social cognition. Learning and Behavior, 2020, 48, 432-443.	1.0	16
76	Human–dog relationships as a working framework for exploring human–robot attachment: a multidisciplinary review. Animal Cognition, 2021, 24, 371-385.	1.8	15
77	MALINI (Machine Learning in NeuroImaging): A MATLAB toolbox for aiding clinical diagnostics using resting-state fMRI data. Data in Brief, 2020, 29, 105213.	1.0	14
78	A rigorous approach for testing the constructionist hypotheses of brain function. Behavioral and Brain Sciences, 2012, 35, 148-149.	0.7	13
79	Parameterized hemodynamic response function data of healthy individuals obtained from resting-state functional MRI in a 7T MRI scanner. Data in Brief, 2018, 17, 1175-1179.	1.0	13
80	Strength and Temporal Variance of the Default Mode Network to Investigate Chronic Mild Traumatic Brain Injury in Service Members with Psychological Trauma. Journal of Experimental Neuroscience, 2019, 13, 117906951983396.	2.3	13
81	Converting knowledge into value. International Journal of Physical Distribution and Logistics Management, 2014, 44, 655-670.	7.4	12
82	The neural signatures of egocentric bias in normative decision-making. Brain Imaging and Behavior, 2019, 13, 685-698.	2.1	12
83	Combining Prospective Acquisition CorrEction (PACE) with retrospective correction to reduce motion artifacts in resting state fMRI data. Brain and Behavior, 2019, 9, e01341.	2.2	12
84	Investigation of True High Frequency Electrical Substrates of fMRI-Based Resting State Networks Using Parallel Independent Component Analysis of Simultaneous EEG/fMRI Data. Frontiers in Neuroinformatics, 2017, 11, 74.	2.5	11
85	Estimated hemodynamic response function parameters obtained from resting state BOLD fMRI signals in subjects with autism spectrum disorder and matched healthy subjects. Data in Brief, 2018, 19, 1305-1309.	1.0	11
86	Identifying neuropsychiatric disorders using unsupervised clustering methods: Data and code. Data in Brief, 2019, 22, 570-573.	1.0	11
87	Structural Connectome Disruptions in Military Personnel with Mild Traumatic Brain Injury and Post-Traumatic Stress Disorder. Journal of Neurotrauma, 2020, 37, 2102-2112.	3.4	11
88	Directed Transfer Function Analysis of fMRI Data to Investigate Network Dynamics. , 2006, 2006, 671-4.		10
89	Form 'defines' function: Neural connectivity between aesthetic perception and product purchase decisions in an fMRI study. Journal of Consumer Behaviour, 2016, 15, 335-347.	4.2	10
90	A Realistic Framework for Investigating Decision Making in the Brain With High Spatiotemporal Resolution Using Simultaneous EEG/fMRI and Joint ICA. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 814-825.	6.3	10

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91	Training Dogs for Awake, Unrestrained Functional Magnetic Resonance Imaging. Journal of Visualized Experiments, 2019, , .	0.3	10
92	Density-based clustering of static and dynamic functional MRI connectivity features obtained from subjects with cognitive impairment. Brain Informatics, 2020, 7, 19.	3.0	10
93	Neural Correlates of Consumer Buying Motivations: A 7T functional Magnetic Resonance Imaging (fMRI) Study. Frontiers in Neuroscience, 2017, 11, 512.	2.8	9
94	Zinc Nanoparticles Enhance Brain Connectivity in the Canine Olfactory Network: Evidence From an fMRI Study in Unrestrained Awake Dogs. Frontiers in Veterinary Science, 2018, 5, 127.	2.2	9
95	Deterioration from healthy to mild cognitive impairment and Alzheimer's disease mirrored in corresponding loss of centrality in directed brain networks. Brain Informatics, 2019, 6, 8.	3.0	9
96	Differential neural activation when voluntarily regulating emotions in service members with chronic mild traumatic brain injury. Applied Neuropsychology Adult, 2019, 26, 76-88.	1.2	9
97	Multi-Level Clustering of Dynamic Directional Brain Network Patterns and Their Behavioral Relevance. Frontiers in Neuroscience, 2019, 13, 1448.	2.8	9
98	Neural Underpinnings of Financial Decision Bias in Older Adults: Putative Theoretical Models and a Way to Reconcile Them. Frontiers in Neuroscience, 2019, 13, 184.	2.8	8
99	Dog–human social relationship: representation of human face familiarity and emotions in the dog brain. Animal Cognition, 2021, 24, 251-266.	1.8	8
100	Connectivity Analysis of Human Functional MRI Data: From Linear to Nonlinear and Static to Dynamic. Lecture Notes in Computer Science, 2006, , 17-24.	1.3	7
101	The Effect of Light Sedation with Midazolam on Functional Connectivity of the Dorsal Attention Network. Brain Sciences, 2021, 11, 1107.	2.3	6
102	Characterization of Hemodynamic Alterations in Schizophrenia and Bipolar Disorder and Their Effect on Resting-State fMRI Functional Connectivity. Schizophrenia Bulletin, 2021, , .	4.3	6
103	Detecting nonlinear dynamics of functional connectivity. , 2004, , .		5
104	Functional parcellation of the hippocampus based on its layer-specific connectivity with default mode and dorsal attention networks. NeuroImage, 2022, 254, 119078.	4.2	5
105	Effect of Intranasal Oxytocin on Resting-state Effective Connectivity in Schizophrenia. Schizophrenia Bulletin, 2022, 48, 1115-1124.	4.3	5
106	Demonstration and validation of a new pressure-based MRI-safe pain tolerance device. Journal of Neuroscience Methods, 2016, 271, 160-168.	2.5	4
107	Resting state fMRI connectivity is sensitive to laminar connectional architecture in the human brain. Brain Informatics, 2022, 9, 2.	3.0	4
108	Resting state fMRI data from subjects scanned with the EPI-PACE (Echoplanar Imaging – Prospective) Tj ETQq0 0 0 rgBT /Overlock 10	1.0	3

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109	Predicting Autism Spectrum Disorder from Brain Imaging Data by Graph Convolutional Network. , 2021, , .		3
110	Spatial embedding of fMRI for investigating local coupling in human brain. , 2005, , .		2
111	Clustering of dynamic functional connectivity features obtained from functional Magnetic Resonance Imaging data. , 2015, , .		2
112	North American Football Fans Show Neurofunctional Differences in Response to Violence: Implications for Public Health and Policy. Frontiers in Public Health, 2018, 6, 177.	2.7	2
113	DisConICA: a Software Package for Assessing Reproducibility of Brain Networks and their Discriminability across Disorders. Neuroinformatics, 2020, 18, 87-107.	2.8	2
114	A neurobehavioral study on the efficacy of price interventions in promoting healthy food choices among low socioeconomic families. Scientific Reports, 2020, 10, 15435.	3.3	2
115	Intrinsic functional connectivity of the frontoparietal network predicts inter-individual differences in the propensity for costly third-party punishment. Cognitive, Affective and Behavioral Neuroscience, 2021, 21, 1222-1232.	2.0	2
116	Maternal vitamin B12, folate during pregnancy and neurocognitive outcomes in young adults of the Pune Maternal Nutrition Study (PMNS) prospective birth cohort: study protocol. BMJ Open, 2021, 11, e046242.	1.9	2
117	Simultaneous investigation of local and distributed functional brain connectivity from fMRI data. , 2011, , .		1
118	Neurofunctional Segmentation Shifts in the Hippocampus. Frontiers in Human Neuroscience, 2021, 15, 729836.	2.0	1
119	Fatigue-induced changes in brain nonlinearity inferred by nonparametric and differential equation models of fMRI. , 2011, , .		0
120	Spatial imagery is more associated with unfamiliar than familiar haptic shape perception: Activation and connectivity analyses. Multisensory Research, 2013, 26, 162-163.	1.1	0
121	Probabilistic Methods in Computational Neuroscience. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 15, 535-536.	3.0	0
122	T169. COGNITIVE INSIGHT AND CORTICAL THICKNESS IN SCHIZOPHRENIA. Schizophrenia Bulletin, 2018, 44, S181-S181.	4.3	0
123	T141. CHARACTERIZATION OF HEMODYNAMIC ALTERATIONS IN SCHIZOPHRENIA AND BIPOLAR DISORDER AND THEIR EFFECT ON RESTING-STATE FUNCTIONAL CONNECTIVITY. Schizophrenia Bulletin, 2018, 44, S170-S170.	4.3	0
124	Intrauterine Exposure to Vitamin B12 and Folate Imbalance and Brain Structure in Young Adults of the Pune Maternal Nutrition Study (PMNS) Birth Cohort. Current Developments in Nutrition, 2021, 5, 894.	0.3	0
125	Stress-induced changes in effective connectivity during regulation of the emotional response to threat. Brain Connectivity, 2021, , .	1.7	0
126	Decoding item-specific information in visual short-term memory from the hippocampal DG/CA3 subfield using high-resolution fMRI. Journal of Vision, 2018, 18, 370.	0.3	0

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127	Research Trends in the Application of Yoga to Human Health: A Data Science Approach. International Journal of Public Mental Health & Neurosciences, 2020, 7, 8-13.	0.0	0
128	Improving Brain Dysfunction Prediction by GAN: A Functional-Connectivity Generator Approach. , 2021, , .		0
129	Directed Transfer Function Analysis of fMRI Data to Investigate Network Dynamics. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0