Srikantan S Nagarajan

List of Publications by Year
in descending order

128 papers	5,986 citations	94381 37 h-index	91828 69 g-index
142 all docs	142 docs citations	142 times ranked	6362 citing authors

#	Article	IF	Citations
1	Incidence and impact of subclinical epileptiform activity in Alzheimer's disease. Annals of Neurology, 2016, 80, 858-870.	2.8	373
2	Speech Production as State Feedback Control. Frontiers in Human Neuroscience, 2011, 5, 82.	1.0	312
3	A unified Bayesian framework for MEG/EEG source imaging. NeuroImage, 2009, 44, 947-966.	2.1	295
4	Five-dimensional neuroimaging: Localization of the time–frequency dynamics of cortical activity. NeuroImage, 2008, 40, 1686-1700.	2.1	249
5	Mapping functional connectivity in patients with brain lesions. Annals of Neurology, 2008, 63, 193-203.	2.8	214
6	Latent Variable Bayesian Models for Promoting Sparsity. IEEE Transactions on Information Theory, 2011, 57, 6236-6255.	1.5	210
7	Human cortical sensorimotor network underlying feedback control of vocal pitch. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2653-2658.	3.3	207
8	Global and regional functional connectivity maps of neural oscillations in focal epilepsy. Brain, 2015, 138, 2249-2262.	3.7	198
9	Robust Bayesian estimation of the location, orientation, and time course of multiple correlated neural sources using MEG. NeuroImage, 2010, 49, 641-655.	2.1	186
10	White Matter Changes of Neurite Density and Fiber Orientation Dispersion during Human Brain Maturation. PLoS ONE, 2015, 10, e0123656.	1.1	154
11	Opposing Brain Differences in 16p11.2 Deletion and Duplication Carriers. Journal of Neuroscience, 2014, 34, 11199-11211.	1.7	149
12	Clinical Symptoms and Alpha Band Resting-State Functional Connectivity Imaging in Patients With Schizophrenia: Implications for Novel Approaches to Treatment. Biological Psychiatry, 2011, 70, 1134-1142.	0.7	134
13	Intensive cognitive training in schizophrenia enhances working memory and associated prefrontal cortical efficiency in a manner that drives long-term functional gains. NeuroImage, 2014, 99, 281-292.	2.1	130
14	Functional Organization of Squirrel Monkey Primary Auditory Cortex: Responses to Pure Tones. Journal of Neurophysiology, 2001, 85, 1732-1749.	0.9	110
15	Effect of Levetiracetam on Cognition in Patients With Alzheimer Disease With and Without Epileptiform Activity. JAMA Neurology, 2021, 78, 1345.	4.5	109
16	MEG/EEG Source Reconstruction, Statistical Evaluation, and Visualization with NUTMEG. Computational Intelligence and Neuroscience, 2011, 2011, 1-17.	1.1	104
17	Bayesian Machine Learning: EEG/MEG signal processing measurements. IEEE Signal Processing Magazine, 2016, 33, 14-36.	4.6	100
18	Optimal timing of pulse onset for language mapping with navigated repetitive transcranial magnetic stimulation. NeuroImage, 2014, 100, 219-236.	2.1	93

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19	Dynamics of hemispheric dominance for language assessed by magnetoencephalographic imaging. Annals of Neurology, 2012, 71, 668-686.	2.8	88
20	Safety and tolerability of navigated TMS for preoperative mapping in neurosurgical patients. Clinical Neurophysiology, 2016, 127, 1895-1900.	0.7	86
21	The Contribution of the Corpus Callosum to Language Lateralization. Journal of Neuroscience, 2016, 36, 4522-4533.	1.7	77
22	A probabilistic algorithm integrating source localization and noise suppression for MEG and EEG data. NeuroImage, 2007, 37, 102-115.	2.1	71
23	A bilateral cortical network responds to pitch perturbations in speech feedback. NeuroImage, 2014, 86, 525-535.	2.1	71
24	Aberrant White Matter Microstructure in Children with 16p11.2 Deletions. Journal of Neuroscience, 2014, 34, 6214-6223.	1.7	70
25	Performance evaluation of the Champagne source reconstruction algorithm on simulated and real M/EEG data. NeuroImage, 2012, 60, 305-323.	2.1	69
26	The FACTS model of speech motor control: Fusing state estimation and task-based control. PLoS Computational Biology, 2019, 15, e1007321.	1.5	69
27	Parsing the Phonological Loop: Activation Timing in the Dorsal Speech Stream Determines Accuracy in Speech Reproduction. Journal of Neuroscience, 2013, 33, 5439-5453.	1.7	63
28	Neurophysiological signatures in Alzheimer's disease are distinctly associated with TAU, amyloid-β accumulation, and cognitive decline. Science Translational Medicine, 2020, 12, .	5.8	59
29	Auditory Cortical Plasticity Drives Training-Induced Cognitive Changes in Schizophrenia. Schizophrenia Bulletin, 2015, 42, sbv087.	2.3	58
30	Regional functional connectivity predicts distinct cognitive impairments in Alzheimer's disease spectrum. NeuroImage: Clinical, 2014, 5, 385-395.	1.4	54
31	Distinct spatiotemporal patterns of neuronal functional connectivity in primary progressive aphasia variants. Brain, 2017, 140, 2737-2751.	3.7	53
32	Dual signal subspace projection (DSSP): a novel algorithm for removing large interference in biomagnetic measurements. Journal of Neural Engineering, 2016, 13, 036007.	1.8	52
33	Probabilistic algorithms for MEG/EEG source reconstruction using temporal basis functions learned from data. NeuroImage, 2008, 41, 924-940.	2.1	50
34	Preoperative localization of hand motor cortex by adaptive spatial filtering of magnetoencephalography data. Journal of Neurosurgery, 2008, 109, 228-237.	0.9	47
35	Spectral graph theory of brain oscillations. Human Brain Mapping, 2020, 41, 2980-2998.	1.9	46
36	Resection of Motor Eloquent Metastases Aided by Preoperative nTMS-Based Motor Maps—Comparison of Two Observational Cohorts. Frontiers in Oncology, 2016, 6, 261.	1.3	45

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37	Multiple Midfrontal Thetas Revealed by Source Separation of Simultaneous MEG and EEG. Journal of Neuroscience, 2020, 40, 7702-7713.	1.7	45
38	Altered excitatory and inhibitory neuronal subpopulation parameters are distinctly associated with tau and amyloid in Alzheimer's disease. ELife, 0, 11, .	2.8	45
39	A probabilistic algorithm for robust interference suppression in bioelectromagnetic sensor data. Statistics in Medicine, 2007, 26, 3886-3910.	0.8	44
40	Abnormal vocal behavior predicts executive and memory deficits in Alzheimer's disease. Neurobiology of Aging, 2017, 52, 71-80.	1.5	44
41	Magnetoencephalography imaging of high frequency oscillations strengthens presurgical localization and outcome prediction. Brain, 2019, 142, 3514-3529.	3.7	42
42	Electromagnetic Brain Imaging. , 2015, , .		41
43	Hierarchical multiscale Bayesian algorithm for robust MEG/EEG source reconstruction. NeuroImage, 2018, 183, 698-715.	2.1	40
44	White matter microstructure predicts cognitive training-induced improvements in attention and executive functioning in schizophrenia. Schizophrenia Research, 2018, 193, 276-283.	1.1	39
45	Reciprocal white matter alterations due to 16p11.2 chromosomal deletions versus duplications. Human Brain Mapping, 2016, 37, 2833-2848.	1.9	37
46	Neural signal during immediate reward anticipation in schizophrenia: Relationship to real-world motivation and function. NeuroImage: Clinical, 2015, 9, 153-163.	1.4	35
47	MEG imaging of recurrent gliomas reveals functional plasticity of hemispheric language specialization. Human Brain Mapping, 2019, 40, 1082-1092.	1.9	35
48	A graphical model for estimating stimulus-evoked brain responses from magnetoencephalography data with large background brain activity. NeuroImage, 2006, 30, 400-416.	2.1	34
49	Increased striatal functional connectivity with auditory cortex in tinnitus. Frontiers in Human Neuroscience, 2015, 9, 568.	1.0	34
50	Magnetoencephalographic Imaging of Auditory and Somatosensory Cortical Responses in Children with Autism and Sensory Processing Dysfunction. Frontiers in Human Neuroscience, 2017, 11, 259.	1.0	32
51	Abnormal Speech Motor Control in Individuals with 16p11.2 Deletions. Scientific Reports, 2018, 8, 1274.	1.6	31
52	Abnormally increased vocal responses to pitch feedback perturbations in patients with cerebellar degeneration. Journal of the Acoustical Society of America, 2019, 145, EL372-EL378.	0.5	30
53	Bihemispheric network dynamics coordinating vocal feedback control. Human Brain Mapping, 2016, 37, 1474-1485.	1.9	29
54	Bayesian electromagnetic spatio-temporal imaging of extended sources with Markov Random Field and temporal basis expansion. NeuroImage, 2016, 139, 385-404.	2.1	29

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55	Magnetoencephalographic imaging of ictal high‑frequency oscillations (80–200 Hz) in pharmacologically resistant focal epilepsy. Epilepsia, 2018, 59, 190-202.	2.6	28
56	Brain MR Imaging Findings and Associated Outcomes in Carriers of the Reciprocal Copy Number Variation at 16p11.2. Radiology, 2018, 286, 217-226.	3.6	27
57	Neural correlates of abnormal auditory feedback processing during speech production in Alzheimer's disease. Scientific Reports, 2019, 9, 5686.	1.6	25
58	Neuronal synchrony abnormalities associated with subclinical epileptiform activity in early-onset Alzheimer's disease. Brain, 2022, 145, 744-753.	3.7	25
59	Robust estimation of noise for electromagnetic brain imaging with the champagne algorithm. NeuroImage, 2021, 225, 117411.	2.1	24
60	Reality Monitoring and Feedback Control of Speech Production Are Related Through Self-Agency. Frontiers in Human Neuroscience, 2018, 12, 82.	1.0	23
61	Motor Cortical Network Plasticity in Patients With Recurrent Brain Tumors. Frontiers in Human Neuroscience, 2020, 14, 118.	1.0	23
62	Spectral graph theory of brain oscillations‑Revisited and improved. NeuroImage, 2022, 249, 118919.	2.1	22
63	Performance of Prewhitening Beamforming in MEG Dual Experimental Conditions. IEEE Transactions on Biomedical Engineering, 2008, 55, 1112-1121.	2.5	21
64	Robust Empirical Bayesian Reconstruction of Distributed Sources for Electromagnetic Brain Imaging. IEEE Transactions on Medical Imaging, 2020, 39, 567-577.	5.4	21
65	Neural Mechanisms of Positive Mood Induced Modulation of Reality Monitoring. Frontiers in Human Neuroscience, 2016, 10, 581.	1.0	20
66	Safety and tolerability of navigated TMS in healthy volunteers. Clinical Neurophysiology, 2016, 127, 1916-1918.	0.7	20
67	Abnormal auditory and language pathways in children with 16p11.2 deletion. NeuroImage: Clinical, 2015, 9, 50-57.	1.4	19
68	Relationship between M100 Auditory Evoked Response and Auditory Radiation Microstructure in 16p11.2 Deletion and Duplication Carriers. American Journal of Neuroradiology, 2016, 37, 1178-1184.	1.2	19
69	The impact of high functional connectivity network hub resection on language task performance in adult low- and high-grade glioma. Journal of Neurosurgery, 2021, 134, 1102-1112.	0.9	19
70	A Real-Time Magnetoencephalography Brain-Computer Interface Using Interactive 3D Visualization and the Hadoop Ecosystem. Brain Sciences, 2015, 5, 419-440.	1.1	18
71	Neural mechanisms of mood-induced modulation of reality monitoring in schizophrenia. Cortex, 2017, 91, 271-286.	1.1	17
72	Reduced synchrony in alpha oscillations during life predicts *post mortem* neurofibrillary tangle density in early‑onset and atypical Alzheimer's disease. Alzheimer's and Dementia, 2021, 17, 2009-2019.	0.4	17

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73	Vocal motor control and central auditory impairments in unilateral vocal fold paralysis. Laryngoscope, 2019, 129, 2112-2117.	1.1	16
74	Human caudate nucleus subdivisions in tinnitus modulation. Journal of Neurosurgery, 2020, 132, 705-711.	0.9	16
75	Controlled Support MEG imaging. NeuroImage, 2006, 33, 878-885.	2.1	15
76	Spatial plasticity of the auditory cortex in single‐sided deafness. Laryngoscope, 2016, 126, 2785-2791.	1.1	15
77	Intervention-specific patterns of cortical function plasticity during auditory encoding in people with schizophrenia. Schizophrenia Research, 2020, 215, 241-249.	1.1	15
78	NUTMEG: Open Source Software for M/EEG Source Reconstruction. Frontiers in Neuroscience, 2020, 14, 710.	1.4	15
79	Emergence of canonical functional networks from the structural connectome. NeuroImage, 2021, 237, 118190.	2.1	15
80	Unification of sparse Bayesian learning algorithms for electromagnetic brain imaging with the majorization minimization framework. NeuroImage, 2021, 239, 118309.	2.1	15
81	Functional and Structural Brain Plasticity in Adult Onset Single-Sided Deafness. Frontiers in Human Neuroscience, 2018, 12, 474.	1.0	14
82	Corticostriatal functional connectivity of bothersome tinnitus in single-sided deafness. Scientific Reports, 2019, 9, 19552.	1.6	14
83	Taking the sublexical route: brain dynamics of reading in the semantic variant of primary progressive aphasia. Brain, 2020, 143, 2545-2560.	3.7	14
84	The sensitivity and significance of lateralized interictal slow activity on magnetoencephalography in focal epilepsy. Epilepsy Research, 2016, 121, 21-28.	0.8	13
85	Evaluation of a dual signal subspace projection algorithm in magnetoencephalographic recordings from patients with intractable epilepsy and vagus nerve stimulators. NeuroImage, 2019, 188, 161-170.	2.1	13
86	Cross-modal plasticity in adult single-sided deafness revealed by alpha band resting-state functional connectivity. NeuroImage, 2020, 207, 116376.	2.1	13
87	Speech compensation responses and sensorimotor adaptation to formant feedback perturbations. Journal of the Acoustical Society of America, 2021, 149, 1147-1161.	0.5	13
88	Phase I trial of caudate deep brain stimulation for treatment-resistant tinnitus. Journal of Neurosurgery, 2020, 133, 992-1001.	0.9	13
89	Network connectivity predicts effectiveness of responsive neurostimulation in focal epilepsy. Brain Communications, 2022, 4, .	1.5	13
90	Comparison of DSSP and tSSS algorithms for removing artifacts from vagus nerve stimulators in magnetoencephalography data. Journal of Neural Engineering, 2019, 16, 066045.	1.8	12

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91	Establishing a Causal Role for Medial Prefrontal Cortex in Reality Monitoring. Frontiers in Human Neuroscience, 2020, 14, 106.	1.0	12
92	Sensorimotor Cortical Oscillations during Movement Preparation in 16p11.2 Deletion Carriers. Journal of Neuroscience, 2019, 39, 7321-7331.	1.7	11
93	Global resting-state functional connectivity of neural oscillations in tinnitus with and without hearing loss. Human Brain Mapping, 2020, 41, 2846-2861.	1.9	11
94	Striatal networks for tinnitus treatment targeting. Human Brain Mapping, 2022, 43, 633-646.	1.9	11
95	Aberrant Oscillatory Activity during Simple Movement in Task-Specific Focal Hand Dystonia. Frontiers in Neurology, 2012, 3, 165.	1.1	10
96	Subspace-based interference removal methods for a multichannel biomagnetic sensor array. Journal of Neural Engineering, 2017, 14, 051001.	1.8	10
97	Beta-band activity in medial prefrontal cortex predicts source memory encoding and retrieval accuracy. Scientific Reports, 2019, 9, 6814.	1.6	10
98	Optimizing Magnetoencephalographic Imaging Estimation of Language Lateralization for Simpler Language Tasks. Frontiers in Human Neuroscience, 2020, 14, 105.	1.0	10
99	Tinnitus Neuroimaging. Otolaryngologic Clinics of North America, 2020, 53, 583-603.	0.5	9
100	Time-varying dynamic network model for dynamic resting state functional connectivity in fMRI and MEG imaging. NeuroImage, 2022, 254, 119131.	2.1	9
101	Cortical networks for speech motor control in unilateral vocal fold paralysis. Laryngoscope, 2019, 129, 2125-2130.	1.1	8
102	Neuroanatomic Volume Differences in Tinnitus and Hearing Loss. Laryngoscope, 2021, 131, 1863-1868.	1.1	7
103	Sensorimotor adaptation of speech depends on the direction of auditory feedback alteration. Journal of the Acoustical Society of America, 2020, 148, 3682-3697.	0.5	7
104	Source Localization of EEG/MEG Data by Correlating Columns of ICA Solution with Lead Field Matrix. , 2007, , .		6
105	Association of Sensory Processing With Higher-Order Cognition and Functioning in Schizophrenia. JAMA Psychiatry, 2017, 74, 17.	6.0	6
106	Multivariate pattern analysis of brain structure predicts functional outcome after auditory-based cognitive training interventions. NPJ Schizophrenia, 2021, 7, 40.	2.0	6
107	Magnetoencephalography Imaging Reveals Abnormal Information Flow in Temporal Lobe Epilepsy. Brain Connectivity, 2022, 12, 362-373.	0.8	6
108	Reliable and Reproducible GABA Measurements Using Automated Spectral Prescription at Ultra-High Field. Frontiers in Human Neuroscience, 2017, 11, 506.	1.0	5

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109	The Visual Word Form Area compensates for auditory working memory dysfunction in schizophrenia. Scientific Reports, 2020, 10, 8881.	1.6	5
110	Editorial: From Raw MEG/EEG to Publication: How to Perform MEG/EEG Group Analysis With Free Academic Software. Frontiers in Neuroscience, 2022, 16, 854471.	1.4	5
111	COHERENT MEG/EEG SOURCE LOCALIZATION IN TRANSFORMED DATA SPACE. Biomedical Engineering - Applications, Basis and Communications, 2010, 22, 351-365.	0.3	4
112	Clinical Validation of the Champagne Algorithm for Epilepsy Spike Localization. Frontiers in Human Neuroscience, 2021, 15, 642819.	1.0	4
113	Temporal specificity of abnormal neural oscillations during phonatory events in laryngeal dystonia. Brain Communications, 2022, 4, fcac031.	1.5	4
114	Corticalâ€Basal Gangliaâ€Cerebellar Networks in Unilateral Vocal Fold Paralysis: A Pilot Study. Laryngoscope, 2020, 130, 460-464.	1.1	3
115	Intact Correction for Self-Produced Vowel Formant Variability in Individuals With Cerebellar Ataxia Regardless of Auditory Feedback Availability. Journal of Speech, Language, and Hearing Research, 2021, 64, 2234-2247.	0.7	3
116	Empirical Bayesian localization of event-related time-frequency neural activity dynamics. NeuroImage, 2022, 258, 119369.	2.1	3
117	Stability and dynamics of a spectral graph model of brain oscillations. Network Neuroscience, 2023, 7, 48-72.	1.4	3
118	Learning and adaptation in speech production without a vocal tract. Scientific Reports, 2019, 9, 13582.	1.6	2
119	Interhemispheric Auditory Cortical Synchronization in Asymmetric Hearing Loss. Ear and Hearing, 2021, 42, 1253-1262.	1.0	2
120	Clinical Validation of the Champagne Algorithm for Evoked Response Source Localization in Magnetoencephalography. Brain Topography, 2021, , 1.	0.8	2
121	Cortical oscillatory dysfunction in Parkinson disease during movement activation and inhibition. PLoS ONE, 2022, 17, e0257711.	1.1	2
122	Discrete constriction locations describe a comprehensive range of vocal tract shapes in the Maeda model. JASA Express Letters, 2021, 1, 124402.	0.5	2
123	High activity and high functional connectivity are mutually exclusive in resting state zebrafish and human brains. BMC Biology, 2022, 20, 84.	1.7	2
124	Performance of prewhitening beamforming in MEG dual experimental conditions. , 2007, , .		1
125	Abnormal Auditory Mismatch Fields in Children and Adolescents With 16p11.2 Deletion and 16p11.2 Duplication. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2020, 5, 942-950.	1.1	1
126	THE THEORY OF CENTRAL NERVOUS SYSTEM RECORDING. Series on Bioengineering and Biomedical Engineering, 2004, , 448-471.	0.1	1

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127	Linear Dynamical System Response Modeling of Trial-to-Trial Amplitude Variability in Event-Related MEG/EEG. , 2007, , .		0
128	Robust methods for reconstructing brain activity and functional connectivity between brain sourceswith MEG/EEG data. , 2009, , .		0