

Behtash Babadi

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

1,542
citations

471509

17
h-index

477307

29
g-index

56
all docs

56
docs citations

56
times ranked

1701
citing authors

#	ARTICLE	IF	CITATIONS
1	Sequential transmission of task-relevant information in cortical neuronal networks. Cell Reports, 2022, 39, 110878.	6.4	23
2	Direct extraction of signal and noise correlations from two-photon calcium imaging of ensemble neuronal activity. ELife, 2021, 10, .	6.0	15
3	Neural Encoding and Decoding. , 2021, , 1-24.		0
4	Multitaper spectral analysis of neuronal spiking activity driven by latent stationary processes. Signal Processing, 2020, 170, 107429.	3.7	9
5	Multitaper Analysis of Semi-Stationary Spectra From Multivariate Neuronal Spiking Observations. IEEE Transactions on Signal Processing, 2020, 68, 4382-4396.	5.3	1
6	Dynamic estimation of auditory temporal response functions via state-space models with Gaussian mixture process noise. PLoS Computational Biology, 2020, 16, e1008172.	3.2	7
7	Robust Inference of Neuronal Correlations from Blurred and Noisy Spiking Observations. , 2020, , .		4
8	Granger Causal Inference from Indirect Low-Dimensional Measurements with Application to MEG Functional Connectivity Analysis. , 2020, , .		5
9	Neuro-current response functions: A unified approach to MEG source analysis under the continuous stimuli paradigm. NeuroImage, 2020, 211, 116528.	4.2	14
10	Adaptive Frequency-domain Granger Causal Inference from Neuronal Ensemble Data. , 2020, , .		0
11	Title is missing!. , 2020, 16, e1008172.		0
12	Title is missing!. , 2020, 16, e1008172.		0
13	Title is missing!. , 2020, 16, e1008172.		0
14	Title is missing!. , 2020, 16, e1008172.		0
15	Estimation of State-Space Models with Gaussian Mixture Process Noise. , 2019, , .		2
16	Multitaper Analysis of Evolutionary Spectral Density Matrix From Multivariate Spiking Observations. , 2019, , .		1
17	Parallel Processing of Sound Dynamics across Mouse Auditory Cortex via Spatially Patterned Thalamic Inputs and Distinct Areal Intracortical Circuits. Cell Reports, 2019, 27, 872-885.e7.	6.4	88
18	A Statistical Approach to Dynamic Synchrony Analysis of Neuronal Ensemble Spiking. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
19	Real-Time Tracking of Magnetoencephalographic Neuromarkers during a Dynamic Attention-Switching Task. , 2019, 2019, 4148-4151.		4
20	Computationally Efficient Algorithms for Sparse, Dynamic Solutions to the EEG Source Localization Problem. IEEE Transactions on Biomedical Engineering, 2018, 65, 1359-1372.	4.2	30
21	Extracting neuronal functional network dynamics via adaptive Granger causality analysis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3869-E3878.	7.1	72
22	Small Networks Encode Decision-Making in Primary Auditory Cortex. Neuron, 2018, 97, 885-897.e6.	8.1	113
23	Dynamic Bayesian Multitaper Spectral Analysis. IEEE Transactions on Signal Processing, 2018, 66, 1394-1409.	5.3	6
24	Sparsity Meets Dynamics: Robust Solutions to Neuronal Identification and Inverse Problems. , 2018, , 111-140.		0
25	Fast and Stable Signal Deconvolution via Compressible State-Space Models. IEEE Transactions on Biomedical Engineering, 2018, 65, 74-86.	4.2	14
26	Cortical Localization of the Auditory Temporal Response Function from MEG via Non-convex Optimization. , 2018, , .		1
27	Real-Time Decoding of Auditory Attention from EEG via Bayesian Filtering. , 2018, 2018, 25-28.		4
28	Real-Time Tracking of Selective Auditory Attention From M/EEG: A Bayesian Filtering Approach. Frontiers in Neuroscience, 2018, 12, 262.	2.8	94
29	Sampling Requirements for Stable Autoregressive Estimation. IEEE Transactions on Signal Processing, 2017, 65, 2333-2347.	5.3	7
30	Robust Estimation of Self-Exciting Generalized Linear Models With Application to Neuronal Modeling. IEEE Transactions on Signal Processing, 2017, 65, 3733-3748.	5.3	8
31	Robust Estimation of Sparse Narrowband Spectra from Neuronal Spiking Data. IEEE Transactions on Biomedical Engineering, 2017, 64, 2462-2474.	4.2	5
32	Sparsity enables estimation of both subcortical and cortical activity from MEG and EEG. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10465-E10474.	7.1	106
33	Corrections to "Asymptotic Achievability of the Cram�r-Rao Bound for Noisy Compressive Sampling" [Mar 09 1233-1236]. IEEE Transactions on Signal Processing, 2017, 65, 4973-4974.	5.3	1
34	Dynamic Estimation of the Auditory Temporal Response Function From MEG in Competing-Speaker Environments. IEEE Transactions on Biomedical Engineering, 2017, 64, 1896-1905.	4.2	37
35	Sparse spectral estimation from point process observations. , 2017, , .		0
36	Multiplicative updates for optimization problems with dynamics. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
37	Efficient estimation of compressible state-space models with application to calcium signal deconvolution. , 2016, , .		2
38	Recursive Sparse Point Process Regression With Application to Spectrotemporal Receptive Field Plasticity Analysis. IEEE Transactions on Signal Processing, 2016, 64, 2026-2039.	5.3	22
39	Dynamic estimation of causal influences in sparsely-interacting neuronal ensembles. , 2016, , .		2
40	Robust decoding of selective auditory attention from MEG in a competing-speaker environment via state-space modeling. NeuroImage, 2016, 124, 906-917.	4.2	67
41	Robust spectrotemporal decomposition by iteratively reweighted least squares. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5336-45.	7.1	26
42	A Transition in Brain State during Propofol-Induced Unconsciousness. Journal of Neuroscience, 2014, 34, 839-845.	3.6	115
43	A Subspace Pursuit-based Iterative Greedy Hierarchical solution to the neuromagnetic inverse problem. NeuroImage, 2014, 87, 427-443.	4.2	41
44	Convergence and Stability of Iteratively Re-weighted Least Squares Algorithms. IEEE Transactions on Signal Processing, 2014, 62, 183-195.	5.3	67
45	A Review of Multitaper Spectral Analysis. IEEE Transactions on Biomedical Engineering, 2014, 61, 1555-1564.	4.2	244
46	DiBa: A Data-Driven Bayesian Algorithm for Sleep Spindle Detection. IEEE Transactions on Biomedical Engineering, 2012, 59, 483-493.	4.2	30
47	An Adaptive Greedy Algorithm With Application to Nonlinear Communications. IEEE Transactions on Signal Processing, 2010, 58, 2998-3007.	5.3	61
48	SPARLS: The Sparse RLS Algorithm. IEEE Transactions on Signal Processing, 2010, 58, 4013-4025.	5.3	180