Bijan Pesaran

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9151905/publications.pdf

Version: 2024-02-01

74 papers	5,522 citations	186209 28 h-index	128225 60 g-index
83 all docs	83 docs citations	83 times ranked	5203 citing authors

#	Article	IF	Citations
1	Temporal structure in neuronal activity during working memory in macaque parietal cortex. Nature Neuroscience, 2002, 5, 805-811.	7.1	940
2	A procedure for an automated measurement of song similarity. Animal Behaviour, 2000, 59, 1167-1176.	0.8	642
3	Free choice activates a decision circuit between frontal and parietal cortex. Nature, 2008, 453, 406-409.	13.7	390
4	Selecting the signals for a brainâ€“machine interface. Current Opinion in Neurobiology, 2004, 14, 720-726.	2.0	312
5	Dorsal Premotor Neurons Encode the Relative Position of the Hand, Eye, and Goal during Reach Planning. Neuron, 2006, 51, 125-134.	3.8	309
6	Investigating large-scale brain dynamics using field potential recordings: analysis and interpretation. Nature Neuroscience, 2018, 21, 903-919.	7.1	299
7	The role of nonlinear dynamics of the syrinx in the vocalizations of a songbird. Nature, 1998, 395, 67-71.	13.7	217
8	Sensoryâ€“motor transformations for speech occur bilaterally. Nature, 2014, 507, 94-98.	13.7	200
9	Neural prosthetic control signals from plan activity. NeuroReport, 2003, 14, 591-596.	0.6	166
10	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	5.8	145
11	An oscillator model better predicts cortical entrainment to music. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10113-10121.	3.3	124
12	Human Reinforcement Learning Subdivides Structured Action Spaces by Learning Effector-Specific Values. Journal of Neuroscience, 2009, 29, 13524-13531.	1.7	112
13	Multiple component networks support working memory in prefrontal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11084-11089.	3.3	107
14	Optimizing the Decoding of Movement Goals from Local Field Potentials in Macaque Cortex. Journal of Neuroscience, 2011, 31, 18412-18422.	1.7	100
15	Only Coherent Spiking in Posterior Parietal Cortex Coordinates Looking and Reaching. Neuron, 2012, 73, 829-841.	3.8	92
16	Coherent neuronal ensembles are rapidly recruited when making a look-reach decision. Nature Neuroscience, 2016, 19, 327-334.	7.1	88
17	Modelling and prediction of the dynamic responses of large-scale brain networks during direct electrical stimulation. Nature Biomedical Engineering, 2021, 5, 324-345.	11.6	87
18	Modeling behaviorally relevant neural dynamics enabled by preferential subspace identification. Nature Neuroscience, 2021, 24, 140-149.	7.1	77

#	Article	IF	Citations
19	Reaction Time Correlations during Eyeâ€“Hand Coordination: Behavior and Modeling. Journal of Neuroscience, 2011, 31, 2399-2412.	1.7	62
20	A Method for Detection and Classification of Events in Neural Activity. IEEE Transactions on Biomedical Engineering, 2006, 53, 1678-1687.	2.5	61
21	Cognitive neural prosthetics. Current Biology, 2006, 16, R77-R80.	1.8	59
22	Uncovering the Mysterious Origins of Local Field Potentials. Neuron, 2009, 61, 1-2.	3.8	52
23	Decoding covert spatial attention using electrocorticographic (ECoG) signals in humans. NeuroImage, 2012, 60, 2285-2293.	2.1	49
24	Neural Correlates of Visual?Spatial Attention in Electrocorticographic Signals in Humans. Frontiers in Human Neuroscience, 2011, 5, 89.	1.0	48
25	A Relative Position Code for Saccades in Dorsal Premotor Cortex. Journal of Neuroscience, 2010, 30, 6527-6537.	1.7	46
26	Spike-field activity in parietal area LIP during coordinated reach and saccade movements. Journal of Neurophysiology, 2012, 107, 1275-1290.	0.9	45
27	Multiscale low-dimensional motor cortical state dynamics predict naturalistic reach-and-grasp behavior. Nature Communications, 2021, 12, 607.	5.8	44
28	Parsing learning in networks using brainâ€“machine interfaces. Current Opinion in Neurobiology, 2017, 46, 76-83.	2.0	43
29	Temporal coding of reward-guided choice in the posterior parietal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13492-13497.	3.3	35
30	Neural correlations, decisions, and actions. Current Opinion in Neurobiology, 2010, 20, 166-171.	2.0	32
31	Manipulating stored phonological input during verbal working memory. Nature Neuroscience, 2017, 20, 279-286.	7.1	31
32	Oscillatory phase modulates the timing of neuronal activations and resulting behavior. NeuroImage, 2016, 133, 294-301.	2.1	30
33	Competition for Visual Selection in the Oculomotor System. Journal of Neuroscience, 2011, 31, 9298-9306.	1.7	29
34	A training platform for many-dimensional prosthetic devices using a virtual reality environment. Journal of Neuroscience Methods, 2015, 244, 68-77.	1.3	29
35	Differential roles of high gamma and local motor potentials for movement preparation and execution. Brain-Computer Interfaces, 2016, 3, 88-102.	0.9	28
36	Flexible, high-resolution thin-film electrodes for human and animal neural research. Journal of Neural Engineering, 2021, 18, 045009.	1.8	28

#	Article	IF	Citations
37	Sparse model-based estimation of functional dependence in high-dimensional field and spike multiscale networks. Journal of Neural Engineering, 2019, 16, 056022.	1.8	24
38	Multiscale modeling and decoding algorithms for spike-field activity. Journal of Neural Engineering, 2019, 16, 016018.	1.8	22
39	Area MSTd Neurons Encode Visual Stimuli in Eye Coordinates During Fixation and Pursuit. Journal of Neurophysiology, 2011, 105, 60-68.	0.9	20
40	A point-process matched filter for event detection and decoding from population spike trains. Journal of Neural Engineering, 2019, 16, 066016.	1.8	20
41	Translation Speed Compensation in the Dorsal Aspect of the Medial Superior Temporal Area. Journal of Neuroscience, 2007, 27, 2582-2591.	1.7	17
42	Utilizing movement synergies to improve decoding performance for a brain machine interface. , 2013, 2013, 289-92.		16
43	Action selection in multi-effector decision making. NeuroImage, 2013, 70, 66-79.	2.1	16
44	Semi-chronic chamber system for simultaneous subdural electrocorticography, local field potentials, and spike recordings. , 2015, , .		15
45	A Likelihood Method for Computing Selection Times in Spiking and Local Field Potential Activity. Journal of Neurophysiology, 2010, 104, 3705-3720.	0.9	14
46	A Causal Network Analysis of Neuromodulation in the Mood Processing Network. Neuron, 2020, 107, 972-985.e6.	3.8	14
47	Improving scalability in systems neuroscience. Neuron, 2021, 109, 1776-1790.	3.8	14
48	Oculomatic : High speed, reliable, and accurate open-source eye tracking for humans and non-human primates. Journal of Neuroscience Methods, 2016, 270, 138-146.	1.3	13
49	Excitatory/Inhibitory Responses Shape Coherent Neuronal Dynamics Driven by Optogenetic Stimulation in the Primate Brain. Journal of Neuroscience, 2020, 40, 2056-2068.	1.7	12
50	Sufficient sampling for kriging prediction of cortical potential in rat, monkey, and human ÂµECoG. Journal of Neural Engineering, 2021, 18, 036011.	1.8	12
51	Modeling multiscale causal interactions between spiking and field potential signals during behavior. Journal of Neural Engineering, 2022, 19, 026001.	1.8	11
52	Parametric models to relate spike train and LFP dynamics with neural information processing. Frontiers in Computational Neuroscience, 2012, 6, 51.	1.2	10
53	Intraoperative microseizure detection using a high-density micro-electrocorticography electrode array. Brain Communications, 2022, 4, .	1.5	10
54	Where Are Perceptual Decisions Made in the Brain?. Trends in Neurosciences, 2016, 39, 642-644.	4.2	8

#	Article	IF	Citations
55	Modulation of inhibitory communication coordinates looking and reaching. Nature, 2022, 604, 708-713.	13.7	8
56	Development of semi-chronic microdrive system for large-scale circuit mapping in macaque mesolimbic and basal ganglia systems. , 2016, 2016, 5825-5828.		7
57	Minimax-optimal decoding of movement goals from local field potentials using complex spectral features. Journal of Neural Engineering, 2019, 16, 046001.	1.8	7
58	Multiregional communication and the channel modulation hypothesis. Current Opinion in Neurobiology, 2021, 66, 250-257.	2.0	7
59	Multiple spatial representations interact to increase reach accuracy when coordinating a saccade with a reach. Journal of Neurophysiology, 2017, 118, 2328-2343.	0.9	6
60	Monkey-MIMMS: Towards Automated Cellular Resolution Large- Scale Two-Photon Microscopy In The Awake Macaque Monkey. , 2018, 2018, 3013-3016.		6
61	Chronux: a platform for analyzing neural signals. BMC Neuroscience, 2009, 10, .	0.8	5
62	A Modular Implant System for Multimodal Recording and Manipulation of the Primate Brain. , 2018, 2018, 3362-3365.		5
63	Cross-subject decoding of eye movement goals from local field potentials. Journal of Neural Engineering, 2020, 17, 016067.	1.8	4
64	Decoding arm and hand movements across layers of the macaque frontal cortices. , 2012, 2012, 1757-60.		3
65	What to Do, or How to Do It?. Neuron, 2008, 58, 301-303.	3.8	2
66	Identifying multiscale hidden states to decode behavior. , 2018, 2018, 3778-3781.		2
67	Enter the ratrix. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19209-19210.	3.3	1
68	Optimizing recording depth to decode movement goals from cortical field potentials. , 2011, , .		1
69	Development of a closed-loop feedback system for real-time control of a high-dimensional Brain Machine Interface. , 2012, 2012, 4567-70.		1
70	Visual-Motor Integration in the Primate Brain. , 2020, , 532-548.		1
71	Deep Pinsker and James-Stein Neural Networks for Decoding Motor Intentions From Limited Data. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1058-1067.	2.7	0
72	Decoding Field Potentials. , 2014, , 1-4.		0

#	Article	IF	Citations
73	Decoding Field Potentials. , 2015, , 965-968.		0
74	Decoding Field Potentials. , 2022, , 1158-1160.		0