

# Bijan Pesaran

## List of Publications by Year in descending order

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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	Modeling multiscale causal interactions between spiking and field potential signals during behavior. Journal of Neural Engineering, 2022, 19, 026001.	1.8	11
2	Modulation of inhibitory communication coordinates looking and reaching. Nature, 2022, 604, 708-713.	13.7	8
3	Intraoperative microseizure detection using a high-density micro-electrocorticography electrode array. Brain Communications, 2022, 4, .	1.5	10
4	Decoding Field Potentials. , 2022, , 1158-1160.		0
5	Modeling behaviorally relevant neural dynamics enabled by preferential subspace identification. Nature Neuroscience, 2021, 24, 140-149.	7.1	77
6	Multiregional communication and the channel modulation hypothesis. Current Opinion in Neurobiology, 2021, 66, 250-257.	2.0	7
7	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
8	Sufficient sampling for kriging prediction of cortical potential in rat, monkey, and human $\hat{\mu}$ ECoG. Journal of Neural Engineering, 2021, 18, 036011.	1.8	12
9	Improving scalability in systems neuroscience. Neuron, 2021, 109, 1776-1790.	3.8	14
10	Flexible, high-resolution thin-film electrodes for human and animal neural research. Journal of Neural Engineering, 2021, 18, 045009.	1.8	28
11	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
12	Multiscale low-dimensional motor cortical state dynamics predict naturalistic reach-and-grasp behavior. Nature Communications, 2021, 12, 607.	5.8	44
13	A Causal Network Analysis of Neuromodulation in the Mood Processing Network. Neuron, 2020, 107, 972-985.e6.	3.8	14
14	Cross-subject decoding of eye movement goals from local field potentials. Journal of Neural Engineering, 2020, 17, 016067.	1.8	4
15	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
16	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	5.8	145
17	Visual-Motor Integration in the Primate Brain. , 2020, , 532-548.		1
18	A point-process matched filter for event detection and decoding from population spike trains. Journal of Neural Engineering, 2019, 16, 066016.	1.8	20

#	ARTICLE	IF	CITATIONS
19	Sparse model-based estimation of functional dependence in high-dimensional field and spike multiscale networks. <i>Journal of Neural Engineering</i> , 2019, 16, 056022.	1.8	24
20	Minimax-optimal decoding of movement goals from local field potentials using complex spectral features. <i>Journal of Neural Engineering</i> , 2019, 16, 046001.	1.8	7
21	An oscillator model better predicts cortical entrainment to music. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10113-10121.	3.3	124
22	Multiscale modeling and decoding algorithms for spike-field activity. <i>Journal of Neural Engineering</i> , 2019, 16, 016018.	1.8	22
23	A Modular Implant System for Multimodal Recording and Manipulation of the Primate Brain. , 2018, 2018, 3362-3365.		5
24	Monkey-MIMMS: Towards Automated Cellular Resolution Large- Scale Two-Photon Microscopy In The Awake Macaque Monkey. , 2018, 2018, 3013-3016.		6
25	Identifying multiscale hidden states to decode behavior. , 2018, 2018, 3778-3781.		2
26	Investigating large-scale brain dynamics using field potential recordings: analysis and interpretation. <i>Nature Neuroscience</i> , 2018, 21, 903-919.	7.1	299
27	Manipulating stored phonological input during verbal working memory. <i>Nature Neuroscience</i> , 2017, 20, 279-286.	7.1	31
28	Parsing learning in networks using brain-machine interfaces. <i>Current Opinion in Neurobiology</i> , 2017, 46, 76-83.	2.0	43
29	Multiple spatial representations interact to increase reach accuracy when coordinating a saccade with a reach. <i>Journal of Neurophysiology</i> , 2017, 118, 2328-2343.	0.9	6
30	Oculomatic : High speed, reliable, and accurate open-source eye tracking for humans and non-human primates. <i>Journal of Neuroscience Methods</i> , 2016, 270, 138-146.	1.3	13
31	Development of semi-chronic microdrive system for large-scale circuit mapping in macaque mesolimbic and basal ganglia systems. , 2016, 2016, 5825-5828.		7
32	Differential roles of high gamma and local motor potentials for movement preparation and execution. <i>Brain-Computer Interfaces</i> , 2016, 3, 88-102.	0.9	28
33	Where Are Perceptual Decisions Made in the Brain?. <i>Trends in Neurosciences</i> , 2016, 39, 642-644.	4.2	8
34	Temporal coding of reward-guided choice in the posterior parietal cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13492-13497.	3.3	35
35	Oscillatory phase modulates the timing of neuronal activations and resulting behavior. <i>NeuroImage</i> , 2016, 133, 294-301.	2.1	30
36	Coherent neuronal ensembles are rapidly recruited when making a look-reach decision. <i>Nature Neuroscience</i> , 2016, 19, 327-334.	7.1	88

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37	Semi-chronic chamber system for simultaneous subdural electrocorticography, local field potentials, and spike recordings. , 2015, , .		15
38	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
39	A training platform for many-dimensional prosthetic devices using a virtual reality environment. Journal of Neuroscience Methods, 2015, 244, 68-77.	1.3	29
40	Decoding Field Potentials. , 2015, , 965-968.		0
41	Sensoryâ€“motor transformations for speech occur bilaterally. Nature, 2014, 507, 94-98.	13.7	200
42	Decoding Field Potentials. , 2014, , 1-4.		0
43	Utilizing movement synergies to improve decoding performance for a brain machine interface. , 2013, 2013, 289-92.		16
44	Action selection in multi-effector decision making. NeuroImage, 2013, 70, 66-79.	2.1	16
45	Spike-field activity in parietal area LIP during coordinated reach and saccade movements. Journal of Neurophysiology, 2012, 107, 1275-1290.	0.9	45
46	Development of a closed-loop feedback system for real-time control of a high-dimensional Brain Machine Interface. , 2012, 2012, 4567-70.		1
47	Decoding arm and hand movements across layers of the macaque frontal cortices. , 2012, 2012, 1757-60.		3
48	Only Coherent Spiking in Posterior Parietal Cortex Coordinates Looking and Reaching. Neuron, 2012, 73, 829-841.	3.8	92
49	Decoding covert spatial attention using electrocorticographic (ECoG) signals in humans. NeuroImage, 2012, 60, 2285-2293.	2.1	49
50	Parametric models to relate spike train and LFP dynamics with neural information processing. Frontiers in Computational Neuroscience, 2012, 6, 51.	1.2	10
51	Optimizing recording depth to decode movement goals from cortical field potentials. , 2011, , .		1
52	Neural Correlates of Visual?Spatial Attention in Electrocorticographic Signals in Humans. Frontiers in Human Neuroscience, 2011, 5, 89.	1.0	48
53	Area MSTd Neurons Encode Visual Stimuli in Eye Coordinates During Fixation and Pursuit. Journal of Neurophysiology, 2011, 105, 60-68.	0.9	20
54	Competition for Visual Selection in the Oculomotor System. Journal of Neuroscience, 2011, 31, 9298-9306.	1.7	29

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55	Optimizing the Decoding of Movement Goals from Local Field Potentials in Macaque Cortex. <i>Journal of Neuroscience</i> , 2011, 31, 18412-18422.	1.7	100
56	Reaction Time Correlations during Eye-Hand Coordination: Behavior and Modeling. <i>Journal of Neuroscience</i> , 2011, 31, 2399-2412.	1.7	62
57	Neural correlations, decisions, and actions. <i>Current Opinion in Neurobiology</i> , 2010, 20, 166-171.	2.0	32
58	A Relative Position Code for Saccades in Dorsal Premotor Cortex. <i>Journal of Neuroscience</i> , 2010, 30, 6527-6537.	1.7	46
59	A Likelihood Method for Computing Selection Times in Spiking and Local Field Potential Activity. <i>Journal of Neurophysiology</i> , 2010, 104, 3705-3720.	0.9	14
60	Enter the matrix. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 19209-19210.	3.3	1
61	Human Reinforcement Learning Subdivides Structured Action Spaces by Learning Effector-Specific Values. <i>Journal of Neuroscience</i> , 2009, 29, 13524-13531.	1.7	112
62	Chronux: a platform for analyzing neural signals. <i>BMC Neuroscience</i> , 2009, 10, .	0.8	5
63	Uncovering the Mysterious Origins of Local Field Potentials. <i>Neuron</i> , 2009, 61, 1-2.	3.8	52
64	Free choice activates a decision circuit between frontal and parietal cortex. <i>Nature</i> , 2008, 453, 406-409.	13.7	390
65	What to Do, or How to Do It?. <i>Neuron</i> , 2008, 58, 301-303.	3.8	2
66	Translation Speed Compensation in the Dorsal Aspect of the Medial Superior Temporal Area. <i>Journal of Neuroscience</i> , 2007, 27, 2582-2591.	1.7	17
67	Dorsal Premotor Neurons Encode the Relative Position of the Hand, Eye, and Goal during Reach Planning. <i>Neuron</i> , 2006, 51, 125-134.	3.8	309
68	Cognitive neural prosthetics. <i>Current Biology</i> , 2006, 16, R77-R80.	1.8	59
69	A Method for Detection and Classification of Events in Neural Activity. <i>IEEE Transactions on Biomedical Engineering</i> , 2006, 53, 1678-1687.	2.5	61
70	Selecting the signals for a brain-machine interface. <i>Current Opinion in Neurobiology</i> , 2004, 14, 720-726.	2.0	312
71	Neural prosthetic control signals from plan activity. <i>NeuroReport</i> , 2003, 14, 591-596.	0.6	166
72	Temporal structure in neuronal activity during working memory in macaque parietal cortex. <i>Nature Neuroscience</i> , 2002, 5, 805-811.	7.1	940

#	ARTICLE	IF	CITATIONS
73	A procedure for an automated measurement of song similarity. <i>Animal Behaviour</i> , 2000, 59, 1167-1176.	0.8	642
74	The role of nonlinear dynamics of the syrinx in the vocalizations of a songbird. <i>Nature</i> , 1998, 395, 67-71.	13.7	217