

Hiroyuki Nakahara

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/904983/publications.pdf>

Version: 2024-02-01

48
papers

4,965
citations

257101

24
h-index

264894

42
g-index

52
all docs

52
docs citations

52
times ranked

5297
citing authors

#	ARTICLE	IF	CITATIONS
1	Central mechanisms of motor skill learning. <i>Current Opinion in Neurobiology</i> , 2002, 12, 217-222.	2.0	815
2	Structure–stability–function relationships of dendritic spines. <i>Trends in Neurosciences</i> , 2003, 26, 360-368.	4.2	762
3	Parallel neural networks for learning sequential procedures. <i>Trends in Neurosciences</i> , 1999, 22, 464-471.	4.2	702
4	Basal Ganglia Orient Eyes to Reward. <i>Journal of Neurophysiology</i> , 2006, 95, 567-584.	0.9	350
5	Dopamine Neurons Can Represent Context-Dependent Prediction Error. <i>Neuron</i> , 2004, 41, 269-280.	3.8	280
6	Modulation of saccadic eye movements by predicted reward outcome. <i>Experimental Brain Research</i> , 2002, 142, 284-291.	0.7	267
7	Learning to Simulate Others' Decisions. <i>Neuron</i> , 2012, 74, 1125-1137.	3.8	183
8	Higher-Order Interactions Characterized in Cortical Activity. <i>Journal of Neuroscience</i> , 2011, 31, 17514-17526.	1.7	181
9	Parallel Cortico-Basal Ganglia Mechanisms for Acquisition and Execution of Visuomotor Sequences—A Computational Approach. <i>Journal of Cognitive Neuroscience</i> , 2001, 13, 626-647.	1.1	174
10	Information-Geometric Measure for Neural Spikes. <i>Neural Computation</i> , 2002, 14, 2269-2316.	1.3	129
11	Temporal and Rate Coding for Discrete Event Sequences in the Hippocampus. <i>Neuron</i> , 2017, 94, 1248-1262.e4.	3.8	125
12	Population Coding and Decoding in a Neural Field: A Computational Study. <i>Neural Computation</i> , 2002, 14, 999-1026.	1.3	123
13	Synchronous Firing and Higher-Order Interactions in Neuron Pool. <i>Neural Computation</i> , 2003, 15, 127-142.	1.3	115
14	Population Coding with Correlation and an Unfaithful Model. <i>Neural Computation</i> , 2001, 13, 775-797.	1.3	82
15	Multiple Timescales of Memory in Lateral Habenula and Dopamine Neurons. <i>Neuron</i> , 2010, 67, 499-510.	3.8	82
16	Correlation of Primate Caudate Neural Activity and Saccade Parameters in Reward-Oriented Behavior. <i>Journal of Neurophysiology</i> , 2003, 89, 1774-1783.	0.9	78
17	Computational Neuroscience: Mathematical and Statistical Perspectives. <i>Annual Review of Statistics and Its Application</i> , 2018, 5, 183-214.	4.1	48
18	Extended LATER model can account for trial-by-trial variability of both pre- and post-processes. <i>Neural Networks</i> , 2006, 19, 1027-1046.	3.3	42

#	ARTICLE	IF	CITATIONS
19	Difficulty of Singularity in Population Coding. <i>Neural Computation</i> , 2005, 17, 839-858.	1.3	34
20	Differential Reward Coding in the Subdivisions of the Primate Caudate during an Oculomotor Task. <i>Journal of Neuroscience</i> , 2012, 32, 15963-15982.	1.7	32
21	Multiplexing signals in reinforcement learning with internal models and dopamine. <i>Current Opinion in Neurobiology</i> , 2014, 25, 123-129.	2.0	30
22	Information processing in a neuron ensemble with the multiplicative correlation structure. <i>Neural Networks</i> , 2004, 17, 205-214.	3.3	29
23	Near-Saddle-Node Bifurcation Behavior as Dynamics in Working Memory for Goal-Directed Behavior. <i>Neural Computation</i> , 1998, 10, 113-132.	1.3	27
24	Hierarchical Interaction Structure of Neural Activities in Cortical Slice Cultures. <i>Journal of Neuroscience</i> , 2010, 30, 8720-8733.	1.7	25
25	Learning to represent reward structure: A key to adapting to complex environments. <i>Neuroscience Research</i> , 2012, 74, 177-183.	1.0	23
26	Computing Social Value Conversion in the Human Brain. <i>Journal of Neuroscience</i> , 2019, 39, 5153-5172.	1.7	23
27	Self-Organization in the Basal Ganglia with Modulation of Reinforcement Signals. <i>Neural Computation</i> , 2002, 14, 819-844.	1.3	20
28	Internal-Time Temporal Difference Model for Neural Value-Based Decision Making. <i>Neural Computation</i> , 2010, 22, 3062-3106.	1.3	20
29	Encoding of social state information by neuronal activities in the macaque caudate nucleus. <i>Social Neuroscience</i> , 2012, 7, 42-58.	0.7	19
30	Saccade-Related Spread of Activity Across Superior Colliculus May Arise From Asymmetry of Internal Connections. <i>Journal of Neurophysiology</i> , 2006, 96, 765-774.	0.9	18
31	Isolation of gene sets affected specifically by polyglutamine expression: implication of the TOR signaling pathway in neurodegeneration. <i>Cell Death and Differentiation</i> , 2005, 12, 1115-1123.	5.0	17
32	A Comparison of Descriptive Models of a Single Spike Train by Information-Geometric Measure. <i>Neural Computation</i> , 2006, 18, 545-568.	1.3	16
33	Correlation and Independence in the Neural Code. <i>Neural Computation</i> , 2006, 18, 1259-1267.	1.3	16
34	Meta-learning, social cognition and consciousness in brains and machines. <i>Neural Networks</i> , 2022, 145, 80-89.	3.3	15
35	Attention Modulation of Neural Tuning Through Peak and Base Rate. <i>Neural Computation</i> , 2001, 13, 2031-2047.	1.3	12
36	Gene interaction in DNA microarray data is decomposed by information geometric measure. <i>Bioinformatics</i> , 2003, 19, 1124-1131.	1.8	11

#	ARTICLE	IF	CITATIONS
37	A Resource for Transcriptomic Analysis in the Mouse Brain. PLoS ONE, 2008, 3, e3012.	1.1	11
38	Dual Reward Prediction Components Yield Pavlovian Sign- and Goal-Tracking. PLoS ONE, 2014, 9, e108142.	1.1	9
39	Asymptotic behaviors of population codes. Neurocomputing, 2002, 44-46, 697-702.	3.5	5
40	Combining Modalities with Different Latencies for Optimal Motor Control. Journal of Cognitive Neuroscience, 2008, 20, 1966-1979.	1.1	4
41	A comparison of descriptive models of a single spike train by information-geometric measure. Neural Computation, 2006, 18, 545-68.	1.3	4
42	Information decomposition on structured space. , 2016, , .		3
43	Reinforcement learning system based on heuristics free state focusing. Advanced Robotics, 2013, 27, 749-758.	1.1	2
44	Legendre decomposition for tensors*. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 124017.	0.9	1
45	Modulation of caudate activity by social dominance. Neuroscience Research, 2010, 68, e410.	1.0	0
46	Neural correlates of the emulated-other's prediction errors in value-based decision making. Neuroscience Research, 2010, 68, e290-e291.	1.0	0
47	Learning attentive-depth switching while interacting with an agent. , 2011, , .		0
48	Stimulus-Induced Pairwise Interaction Can Be Revealed by Information Geometric Approach. , 2008, , 71-75.		0