Stefano Panzeri

List of Publications by Year in descending order

228 papers	15,142 citations	22153 59 h-index	25787 108 g-index
272 all docs	272 docs citations	272 times ranked	11388 citing authors

#	Article	IF	Citations
1	Modelling and analysis of local field potentials for studying the function of cortical circuits. Nature Reviews Neuroscience, 2013, 14, 770-785.	10.2	693
2	Extracting information from neuronal populations: information theory and decoding approaches. Nature Reviews Neuroscience, 2009, 10, 173-185.	10.2	657
3	Speech Rhythms and Multiplexed Oscillatory Sensory Coding in the Human Brain. PLoS Biology, 2013, 11, e1001752.	5.6	502
4	Sensory neural codes using multiplexed temporal scales. Trends in Neurosciences, 2010, 33, 111-120.	8.6	432
5	Spike-Phase Coding Boosts and Stabilizes Information Carried by Spatial and Temporal Spike Patterns. Neuron, 2009, 61, 597-608.	8.1	427
6	Computing the Local Field Potential (LFP) from Integrate-and-Fire Network Models. PLoS Computational Biology, 2015, 11, e1004584.	3.2	391
7	The Role of Spike Timing in the Coding of Stimulus Location in Rat Somatosensory Cortex. Neuron, 2001, 29, 769-777.	8.1	382
8	Low-Frequency Local Field Potentials and Spikes in Primary Visual Cortex Convey Independent Visual Information. Journal of Neuroscience, 2008, 28, 5696-5709.	3.6	381
9	Correcting for the Sampling Bias Problem in Spike Train Information Measures. Journal of Neurophysiology, 2007, 98, 1064-1072.	1.8	368
10	Phase-of-Firing Coding of Natural Visual Stimuli in Primary Visual Cortex. Current Biology, 2008, 18, 375-380.	3.9	361
11	The Upward Bias in Measures of Information Derived from Limited Data Samples. Neural Computation, 1995, 7, 399-407.	2.2	339
12	The Amplitude and Timing of the BOLD Signal Reflects the Relationship between Local Field Potential Power at Different Frequencies. Journal of Neuroscience, 2012, 32, 1395-1407.	3.6	300
13	Distinct timescales of population coding across cortex. Nature, 2017, 548, 92-96.	27.8	298
14	Correlations and the encoding of information in the nervous system. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 1001-1012.	2.6	291
15	The threshold for conscious report: Signal loss and response bias in visual and frontal cortex. Science, 2018, 360, 537-542.	12.6	264
16	Analytical estimates of limited sampling biases in different information measures. Network: Computation in Neural Systems, 1996, 7, 87-107.	3.6	262
17	Encoding of Naturalistic Stimuli by Local Field Potential Spectra in Networks of Excitatory and Inhibitory Neurons. PLoS Computational Biology, 2008, 4, e1000239.	3.2	247
18	Title is missing!. Network: Computation in Neural Systems, 1996, 7, 87-107.	3.6	239

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19	Population Coding of Stimulus Location in Rat Somatosensory Cortex. Neuron, 2001, 32, 503-514.	8.1	219
20	The Neurophysiology of Backward Visual Masking: Information Analysis. Journal of Cognitive Neuroscience, 1999, 11, 300-311.	2.3	209
21	A toolbox for the fast information analysis of multiple-site LFP, EEG and spike train recordings. BMC Neuroscience, 2009, 10, 81.	1.9	198
22	Cracking the Neural Code for Sensory Perception by Combining Statistics, Intervention, and Behavior. Neuron, 2017, 93, 491-507.	8.1	188
23	Information About Spatial View in an Ensemble of Primate Hippocampal Cells. Journal of Neurophysiology, 1998, 79, 1797-1813.	1.8	179
24	Neural population coding: combining insights from microscopic and mass signals. Trends in Cognitive Sciences, 2015, 19, 162-172.	7.8	178
25	Noradrenergic Neurons of the Locus Coeruleus Are Phase Locked to Cortical Up-Down States during Sleep. Cerebral Cortex, 2012, 22, 426-435.	2.9	170
26	Visual Enhancement of the Information Representation in Auditory Cortex. Current Biology, 2010, 20, 19-24.	3.9	168
27	Head direction cells in the primate pre-subiculum. Hippocampus, 1999, 9, 206-219.	1.9	164
28	Deciphering the Spike Train of a Sensory Neuron: Counts and Temporal Patterns in the Rat Whisker Pathway. Journal of Neuroscience, 2006, 26, 9216-9226.	3.6	150
29	An exact method to quantify the information transmitted by different mechanisms of correlational coding. Network: Computation in Neural Systems, 2003, 14, 35-60.	3.6	147
30	Complementary Contributions of Spike Timing and Spike Rate to Perceptual Decisions in Rat S1 and S2 Cortex. Current Biology, 2015, 25, 357-363.	3.9	142
31	Whisker Vibration Information Carried by Rat Barrel Cortex Neurons. Journal of Neuroscience, 2004, 24, 6011-6020.	3.6	136
32	The Locus Coeruleus Is a Complex and Differentiated Neuromodulatory System. Neuron, 2018, 99, 1055-1068.e6.	8.1	133
33	Information in the neuronal representation of individual stimuli in the primate temporal visual cortex. Journal of Computational Neuroscience, 1997, 4, 309-333.	1.0	119
34	Millisecond encoding precision of auditory cortex neurons. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16976-16981.	7.1	116
35	Muscle synergies in neuroscience and robotics: from input-space to task-space perspectives. Frontiers in Computational Neuroscience, 2013, 7, 43.	2.1	112
36	A Unified Approach to the Study of Temporal, Correlational, and Rate Coding. Neural Computation, 2001, 13, 1311-1349.	2.2	109

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37	How Well Can We Estimate the Information Carried in Neuronal Responses from Limited Samples?. Neural Computation, 1997, 9, 649-665.	2.2	108
38	Structure and flexibility in cortical representations of odour space. Nature, 2020, 583, 253-258.	27.8	108
39	Infraslow State Fluctuations Govern Spontaneous fMRI Network Dynamics. Current Biology, 2019, 29, 2295-2306.e5.	3.9	107
40	On Decoding the Responses of a Population of Neurons from Short Time Windows. Neural Computation, 1999, 11, 1553-1577.	2.2	101
41	Information-theoretic sensitivity analysis: a general method for credit assignment in complex networks. Journal of the Royal Society Interface, 2008, 5, 223-235.	3.4	101
42	Understanding the relationships between spike rate and delta/gamma frequency bands of LFPs and EEGs using a local cortical network model. NeuroImage, 2010, 52, 956-972.	4.2	101
43	Analysis of Slow (Theta) Oscillations as a Potential Temporal Reference Frame for Information Coding in Sensory Cortices. PLoS Computational Biology, 2012, 8, e1002717.	3.2	98
44	Shifts of Gamma Phase across Primary Visual Cortical Sites Reflect Dynamic Stimulus-Modulated Information Transfer. PLoS Biology, 2015, 13, e1002257.	5.6	95
45	The impact of high-order interactions on the rate of synchronous discharge and information transmission in somatosensory cortex. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 3297-3310.	3.4	94
46	Intrinsic excitation-inhibition imbalance affects medial prefrontal cortex differently in autistic men versus women. ELife, 2020, 9, .	6.0	94
47	Firing Rate Distributions and Efficiency of Information Transmission of Inferior Temporal Cortex Neurons to Natural Visual Stimuli. Neural Computation, 1999, 11, 601-631.	2.2	87
48	Diverse and Temporally Precise Kinetic Feature Selectivity in the VPm Thalamic Nucleus. Neuron, 2008, 60, 890-903.	8.1	87
49	Population coding in somatosensory cortex. Current Opinion in Neurobiology, 2002, 12, 441-447.	4.2	86
50	An inhibitory gate for state transition in cortex. ELife, 2017, 6, .	6.0	83
51	Tight Data-Robust Bounds to Mutual Information Combining Shuffling and Model Selection Techniques. Neural Computation, 2007, 19, 2913-2957.	2.2	82
52	The Laminar and Temporal Structure of Stimulus Information in the Phase of Field Potentials of Auditory Cortex. Journal of Neuroscience, 2011, 31, 15787-15801.	3.6	82
53	Homozygous Loss of Autism-Risk Gene CNTNAP2 Results in Reduced Local and Long-Range Prefrontal Functional Connectivity. Cerebral Cortex, 2018, 28, 1141-1153.	2.9	82
54	A unifying model of concurrent spatial and temporal modularity in muscle activity. Journal of Neurophysiology, 2014, 111, 675-693.	1.8	80

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55	Manipulating synthetic optogenetic odors reveals the coding logic of olfactory perception. Science, 2020, 368, .	12.6	80
56	Carbon nanotube composite coating of neural microelectrodes preferentially improves the multiunit signal-to-noise ratio. Journal of Neural Engineering, 2011, 8, 066013.	3.5	79
57	Role of Precise Spike Timing in Coding of Dynamic Vibrissa Stimuli in Somatosensory Thalamus. Journal of Neurophysiology, 2007, 98, 1871-1882.	1.8	76
58	Sensory information in local field potentials and spikes from visual and auditory cortices: time scales and frequency bands. Journal of Computational Neuroscience, 2010, 29, 533-545.	1.0	75
59	Inference of neuronal functional circuitry with spike-triggered non-negative matrix factorization. Nature Communications, 2017, 8, 149.	12.8	74
60	Modeling the effect of locus coeruleus firing on cortical state dynamics and single-trial sensory processing. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12834-12839.	7.1	73
61	Contributions of local speech encoding and functional connectivity to audio-visual speech perception. ELife, 2017, 6, .	6.0	71
62	Rhythmic Auditory Cortex Activity at Multiple Timescales Shapes Stimulusâ€“Response Gain and Background Firing. Journal of Neuroscience, 2015, 35, 7750-7762.	3.6	70
63	Excitatory GABAergic Effects in Striatal Projection Neurons. Journal of Neurophysiology, 2006, 95, 1285-1290.	1.8	67
64	Cortical dynamics during naturalistic sensory stimulations: Experiments and models. Journal of Physiology (Paris), 2011, 105, 2-15.	2.1	64
65	Unique spatiotemporal fMRI dynamics in the awake mouse brain. Current Biology, 2022, 32, 631-644.e6.	3.9	63
66	The structures and functions of correlations in neural population codes. Nature Reviews Neuroscience, 2022, 23, 551-567.	10.2	63
67	Neural Codes Formed by Small and Temporally Precise Populations in Auditory Cortex. Journal of Neuroscience, 2013, 33, 18277-18287.	3.6	62
68	Unaltered Network Activity and Interneuronal Firing During Spontaneous Cortical Dynamics In Vivo in a Mouse Model of Severe Myoclonic Epilepsy of Infancy. Cerebral Cortex, 2016, 26, 1778-1794.	2.9	62
69	Quantitative evaluation of muscle synergy models: a single-trial task decoding approach. Frontiers in Computational Neuroscience, 2013, 7, 8.	2.1	61
70	Comparison of the dynamics of neural interactions between current-based and conductance-based integrate-and-fire recurrent networks. Frontiers in Neural Circuits, 2014, 8, 12.	2.8	60
71	Causal relationships between frequency bands of extracellular signals in visual cortex revealed by an information theoretic analysis. Journal of Computational Neuroscience, 2010, 29, 547-566.	1.0	57
72	Correlations enhance the behavioral readout of neural population activity in association cortex. Nature Neuroscience, 2021, 24, 975-986.	14.8	55

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73	New perspectives on the dialogue between brains and machines. Frontiers in Neuroscience, 2010, 4, 44.	2.8	51
74	Directed information exchange between cortical layers in macaque V1 and V4 and its modulation by selective attention. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	51
75	Emergence of transformation-tolerant representations of visual objects in rat lateral extrastriate cortex. ELife, 2017, 6, .	6.0	49
76	Speed, noise, information and the graded nature of neuronal responses. Network: Computation in Neural Systems, 1996, 7, 365-370.	3.6	49
77	Python for information theoretic analysis of neural data. Frontiers in Neuroinformatics, 2009, 3, 4.	2.5	48
78	Information-theoretic methods for studying population codes. Neural Networks, 2010, 23, 713-727.	5.9	48
79	Stimulus Dependence of Local Field Potential Spectra: Experiment versus Theory. Journal of Neuroscience, 2014, 34, 14589-14605.	3.6	48
80	Using Matrix and Tensor Factorizations for the Single-Trial Analysis of Population Spike Trains. PLoS Computational Biology, 2016, 12, e1005189.	3.2	48
81	Decoding Neuronal Population Activity in Rat Somatosensory Cortex: Role of Columnar Organization. Cerebral Cortex, 2003, 13, 45-52.	2.9	47
82	Tracing the Flow of Perceptual Features in an Algorithmic Brain Network. Scientific Reports, 2016, 5, 17681.	3.3	47
83	Neurons with Stereotyped and Rapid Responses Provide a Reference Frame for Relative Temporal Coding in Primate Auditory Cortex. Journal of Neuroscience, 2012, 32, 2998-3008.	3.6	46
84	The Deceptively Simple N170 Reflects Network Information Processing Mechanisms Involving Visual Feature Coding and Transfer Across Hemispheres. Cerebral Cortex, 2016, 26, 4123-4135.	2.9	45
85	Thalamic Drive of Cortical Parvalbumin-Positive Interneurons during Down States in Anesthetized Mice. Current Biology, 2019, 29, 1481-1490.e6.	3.9	45
86	Increased fMRI connectivity upon chemogenetic inhibition of the mouse prefrontal cortex. Nature Communications, 2022, 13, 1056.	12.8	45
87	A novel test to determine the significance of neural selectivity to single and multiple potentially correlated stimulus features. Journal of Neuroscience Methods, 2012, 210, 49-65.	2.5	44
88	Reading spike timing without a clock: intrinsic decoding of spike trains. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20120467.	4.0	44
89	Correlations, feature-binding and population coding in primary visual cortex. NeuroReport, 2003, 14, 1045-1050.	1.2	42
90	"Information carried by population spike times in the whisker sensory cortex can be decoded without knowledge of stimulus time ". Frontiers in Synaptic Neuroscience, 2010, 2, 17.	2.5	42

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91	Learning to focus on number. Cognition, 2018, 181, 35-45.	2.2	40
92	Simultaneity of responses in a hierarchical visual network. NeuroReport, 2001, 12, 2753-2759.	1.2	39
93	Investigating reduction of dimensionality during single-joint elbow movements: a case study on muscle synergies. Frontiers in Computational Neuroscience, 2013, 7, 11.	2.1	39
94	Attention Induced Gain Stabilization in Broad and Narrow-Spiking Cells in the Frontal Eye-Field of Macaque Monkeys. Journal of Neuroscience, 2016, 36, 7601-7612.	3.6	39
95	The role of individual spikes and spike patterns in population coding of stimulus location in rat somatosensory cortex. BioSystems, 2002, 67, 187-193.	2.0	37
96	Neural coding and contextual influences in the whisker system. Biological Cybernetics, 2009, 100, 427-446.	1.3	36
97	What Can Neuromorphic Event-Driven Precise Timing Add to Spike-Based Pattern Recognition?. Neural Computation, 2015, 27, 561-593.	2.2	35
98	Deciphering the functional role of spatial and temporal muscle synergies in whole-body movements. Scientific Reports, 2018, 8, 8391.	3.3	34
99	Temporal Correlations and Neural Spike Train Entropy. Physical Review Letters, 2001, 86, 5823-5826.	7.8	33
100	Correlations, feature-binding and population coding in primary visual cortex. NeuroReport, 2003, 14, 1045-1050.	1.2	33
101	Spatioâ€temporal prediction and inference by V1 neurons. European Journal of Neuroscience, 2007, 26, 1045-1054.	2.6	32
102	A methodology for assessing the effect of correlations among muscle synergy activations on task-discriminating information. Frontiers in Computational Neuroscience, 2013, 7, 54.	2.1	31
103	Extended field-of-view ultrathin microendoscopes for high-resolution two-photon imaging with minimal invasiveness. ELife, 2020, 9, .	6.0	30
104	Two-dimensional QCD is a one-dimensional Kazakov-Migdal model. Nuclear Physics B, 1994, 416, 751-767.	2.5	29
105	On the use of information theory for the analysis of the relationship between neural and imaging signals. Magnetic Resonance Imaging, 2008, 26, 1015-1025.	1.8	29
106	Open source tools for the information theoretic analysis of neural data. Frontiers in Neuroscience, 2010, 4, .	2.8	27
107	Algorithms of causal inference for the analysis of effective connectivity among brain regions. Frontiers in Neuroinformatics, 2014, 8, 64.	2.5	27
108	Invariant Components of Synergy, Redundancy, and Unique Information among Three Variables. Entropy, 2017, 19, 451.	2.2	27

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109	Transient Disruption of the Inferior Parietal Lobule Impairs the Ability to Attribute Intention to Action. Current Biology, 2020, 30, 4594-4605.e7.	3.9	27
110	Complementary encoding of spatial information in hippocampal astrocytes. PLoS Biology, 2022, 20, e3001530.	5.6	27
111	Synergy and Redundancy in Dual Decompositions of Mutual Information Gain and Information Loss. Entropy, 2017, 19, 71.	2.2	26
112	Cortical responses to touch reflect subcortical integration of LTMR signals. Nature, 2021, 600, 680-685.	27.8	26
113	Functional imaging and neural information coding. NeuroImage, 2004, 21, 1083-1095.	4.2	25
114	Temporal Sharpening of Sensory Responses by Layer V in the Mouse Primary Somatosensory Cortex. Current Biology, 2020, 30, 1589-1599.e10.	3.9	25
115	A critical assessment of different measures of the information carried by correlated neuronal firing. BioSystems, 2002, 67, 177-185.	2.0	24
116	Shaping the Dynamics of a Bidirectional Neural Interface. PLoS Computational Biology, 2012, 8, e1002578.	3.2	24
117	Extracting information in spike time patterns with wavelets and information theory. Journal of Neurophysiology, 2015, 113, 1015-1033.	1.8	24
118	Space-by-time manifold representation of dynamic facial expressions for emotion categorization. Journal of Vision, 2016, 16, 14.	0.3	24
119	Information estimation using nonparametric copulas. Physical Review E, 2018, 98, .	2.1	24
120	Task-discriminative space-by-time factorization of muscle activity. Frontiers in Human Neuroscience, 2015, 9, 399.	2.0	23
121	Distinct ensembles in the noradrenergic locus coeruleus are associated with diverse cortical states. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2116507119.	7.1	23
122	Sequential transmission of task-relevant information in cortical neuronal networks. Cell Reports, 2022, 39, 110878.	6.4	23
123	Coding of Sensory Signals by Neuronal Populations: The Role of Correlated Activity. Neuroscientist, 2003, 9, 175-180.	3.5	22
124	Finite Temperature Lattice QCD in the Large N Limit. International Journal of Modern Physics A, 1997, 12, 1783-1845.	1.5	21
125	Optimal Tuning Widths in Population Coding of Periodic Variables. Neural Computation, 2006, 18, 1555-1576.	2.2	21
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127	Computation of the electroencephalogram (EEG) from network models of point neurons. PLoS Computational Biology, 2021, 17, e1008893.	3.2	20
128	Exact solution of D = 1 Kazakov-Migdal induced gauge theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 293, 161-167.	4.1	19
129	Investigations into the organization of information in sensory cortex. Journal of Physiology (Paris), 2003, 97, 529-536.	2.1	19
130	Biofeedback Signals for Robotic Rehabilitation: Assessment of Wrist Muscle Activation Patterns in Healthy Humans. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 883-892.	4.9	19
131	Space-by-time decomposition for single-trial decoding of M/EEG activity. NeuroImage, 2016, 133, 504-515.	4.2	18
132	Perceptual learning of fine contrast discrimination changes neuronal tuning and population coding in macaque V4. Nature Communications, 2018, 9, 4238.	12.8	18
133	Identifying the signature of prospective motor control in children with autism. Scientific Reports, 2021, 11, 3165.	3.3	18
134	Optimal band separation of extracellular field potentials. Journal of Neuroscience Methods, 2012, 210, 66-78.	2.5	17
135	The Spectrum of Asynchronous Dynamics in Spiking Networks as a Model for the Diversity of Non-rhythmic Waking States in the Neocortex. Cell Reports, 2019, 27, 1119-1132.e7.	6.4	17
136	Speed of feedforward and recurrent processing in multilayer networks of integrate-and-fire neurons. Network: Computation in Neural Systems, 2001, 12, 423-440.	3.6	16
137	Sensory Input Drives Multiple Intracellular Information Streams in Somatosensory Cortex. Journal of Neuroscience, 2010, 30, 10872-10884.	3.6	15
138	State-dependent representation of stimulus-evoked activity in high-density recordings of neural cultures. Scientific Reports, 2018, 8, 5578.	3.3	15
139	Categorical encoding of decision variables in orbitofrontal cortex. PLoS Computational Biology, 2019, 15, e1006667.	3.2	15
140	Information Theory in Neuroscience. Entropy, 2019, 21, 62.	2.2	15
141	The Kazakov-Migdal model as a high temperature lattice gauge theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 302, 80-86.	4.1	14
142	Objective assessment of the functional role of spike train correlations using information measures. Visual Cognition, 2001, 8, 531-547.	1.6	14
143	Testing methodologies for the nonlinear analysis of causal relationships in neurovascular coupling. Magnetic Resonance Imaging, 2010, 28, 1113-1119.	1.8	14
144	Investigating static nonlinearities in neurovascular coupling. Magnetic Resonance Imaging, 2011, 29, 1358-1364.	1.8	14

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145	A Bidirectional Brain-Machine Interface Algorithm That Approximates Arbitrary Force-Fields. PLoS ONE, 2014, 9, e91677.	2.5	14
146	Data-Robust Tight Lower Bounds to the Information Carried by Spike Times of a Neuronal Population. Neural Computation, 2005, 17, 1962-2005.	2.2	13
147	Cholinergic Modulation Promotes Attentional Modulation in Primary Visual Cortex- A Modeling Study. Scientific Reports, 2019, 9, 20186.	3.3	13
148	A bidirectional brain-machine interface connecting alert rodents to a dynamical system. , 2015, 2015, 51-4.		12
149	Implications of the Dependence of Neuronal Activity on Neural Network States for the Design of Brain-Machine Interfaces. Frontiers in Neuroscience, 2016, 10, 165.	2.8	12
150	The Complexity of Dynamics in Small Neural Circuits. PLoS Computational Biology, 2016, 12, e1004992.	3.2	12
151	The role of correlated firing and synchrony in coding information about single and separate objects in cat V1. Neurocomputing, 2002, 44-46, 579-584.	5.9	11
152	Minimum Information about a Neuroscience Investigation (MINI) Electrophysiology. Nature Precedings, 2008, , .	0.1	11
153	High-Accuracy Detection of Neuronal Ensemble Activity in Two-Photon Functional Microscopy Using Smart Line Scanning. Cell Reports, 2020, 30, 2567-2580.e6.	6.4	11
154	Minimum Information about a Neuroscience Investigation (MINI): Electrophysiology. Nature Precedings, 2009, , .	0.1	10
155	On the presence of high-order interactions among somatosensory neurons and their effect on information transmission. Journal of Physics: Conference Series, 2009, 197, 012013.	0.4	10
156	Understanding Neural Population Coding: Information Theoretic Insights from the Auditory System. Advances in Neuroscience (Hindawi), 2014, 2014, 1-14.	3.1	10
157	Cholinergic Control of Information Coding. Trends in Neurosciences, 2017, 40, 522-524.	8.6	10
158	Pattern Storage, Bifurcations, and Groupwise Correlation Structure of an Exactly Solvable Asymmetric Neural Network Model. Neural Computation, 2018, 30, 1258-1295.	2.2	9
159	Intersecting kinematic encoding and readout of intention in autism. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	9
160	Dynamic brain-machine interface: A novel paradigm for bidirectional interaction between brains and dynamical systems. , 2011, 2011, 4592-5.		8
161	Spike time based unsupervised learning of receptive fields for event-driven vision. , 2015, , .		8
162	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. BMC Neuroscience, 2017, 18, .	1.9	7

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163	Stimulus-dependent relationships between behavioral choice and sensory neural responses. ELife, 2021, 10, .	6.0	7
164	A Global Sensitivity Index for Biophysically Detailed Cardiac Cell Models: A Computational Approach. Lecture Notes in Computer Science, 2009, , 366-375.	1.3	7
165	Coding of stimulus location by spike timing in rat somatosensory cortex. Neurocomputing, 2002, 44-46, 573-578.	5.9	6
166	A Formalism for Evaluating Analytically the Cross-Correlation Structure of a Firing-Rate Network Model. Journal of Mathematical Neuroscience, 2015, 5, 6.	2.4	6
167	Transitions between asynchronous and synchronous states: a theory of correlations in small neural circuits. Journal of Computational Neuroscience, 2018, 44, 25-43.	1.0	6
168	Using intersection information to map stimulus information transfer within neural networks. BioSystems, 2019, 185, 104028.	2.0	6
169	Sensorimotor communication at the intersection between kinematic coding and readout. Physics of Life Reviews, 2019, 28, 39-42.	2.8	6
170	Brain Function: Novel Technologies Driving Novel Understanding. , 2014, , 299-334.		6
171	Deconfinement transition in large-N lattice gauge theory. Nuclear Physics B, 1995, 435, 172-206.	2.5	5
172	Estimating Information-Theoretic Quantities. , 2014, , 1-13.		5
173	Speech Rhythms and Multiplexed Oscillatory Sensory Coding in the Human Brain. PLoS Biology, 2013, 11, e1001752.	5.6	5
174	A Practical Guide to Information Analysis of Spike Trains. , 2003, , 139-154.		5
175	Applications of Information Theory to Analysis of Neural Data. , 2014, , 1-6.		4
176	Natural Translating Locomotion Modulates Cortical Activity at Action Observation. Frontiers in Systems Neuroscience, 2017, 11, 83.	2.5	4
177	The Identity of Information: How Deterministic Dependencies Constrain Information Synergy and Redundancy. Entropy, 2018, 20, 169.	2.2	4
178	Head direction cells in the primate preâ€subiculum. Hippocampus, 1999, 9, 206-219.	1.9	4
179	Correlated firing and the information represented by neurons in short epochs. Neurocomputing, 1999, 26-27, 499-504.	5.9	3
180	Hierarchical organization and neuronal response latencies in the primate visual system. Neurocomputing, 2001, 38-40, 1519-1523.	5.9	3

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181	Functional imaging and neuronal information processing. Neurocomputing, 2002, 44-46, 1127-1131.	5.9	3
182	Costs and benefits of communicating vigor. Behavioral and Brain Sciences, 2021, 44, e124.	0.7	3
183	Mathematical studies of the dynamics of finite-size binary neural networks: A review of recent progress. Mathematical Biosciences and Engineering, 2019, 16, 8025-8059.	1.9	3
184	Methods for inferring neural circuit interactions and neuromodulation from local field potential and electroencephalogram measures. Brain Informatics, 2021, 8, 27.	3.0	3
185	THE c=1 MATRIX MODEL FORMULATION OF TWO-DIMENSIONAL YANG-MILLS THEORIES. Modern Physics Letters A, 1993, 08, 3201-3214.	1.2	2
186	Topological clustering of synchronous spike trains. , 2008, , .		2
187	Different LFP frequency bands convey complementary information about the BOLD signal. BMC Neuroscience, 2011, 12, .	1.9	2
188	Stationary-State Statistics of a Binary Neural Network Model with Quenched Disorder. Entropy, 2019, 21, 630.	2.2	2
189	Decoding Population Neuronal Responses by Topological Clustering. Lecture Notes in Computer Science, 2008, , 547-556.	1.3	2
190	Synchronisation, Binding, and the Role of Correlated Firing in Fast Information Transmission. Lecture Notes in Computer Science, 2001, , 212-226.	1.3	2
191	Population Coding. , 2010, , 303-319.		2
192	Local Field Potential, Relationship to BOLD Signal. , 2014, , 1-11.		2
193	A population code with added grandmothers?. Behavioral and Brain Sciences, 2000, 23, 495-496.	0.7	1
194	A downward biased estimator of spike timing information. Neurocomputing, 2007, 70, 1777-1781.	5.9	1
195	Local field potential phase and spike timing convey information about different visual features in primary visual cortex. BMC Neuroscience, 2011, 12, .	1.9	1
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