Masafumi Oizumi

List of Publications by Year
in descending order

29 papers	1,203 citations	840585 11 h-index	501076 28 g-index
33 all docs	33 docs citations	33 times ranked	911 citing authors

#	Article	IF	Citations
1	Quantifying brain state transition cost via Schrödinger Bridge. Network Neuroscience, 2022, 6, 118-134.	1.4	4
2	Information flow in the rat thalamo-cortical system: spontaneous vs. stimulus-evoked activities. Scientific Reports, 2021, 11, 19252.	1.6	1
3	A general spectral decomposition of causal influences applied to integrated information. Journal of Neuroscience Methods, 2020, 330, 108443.	1.3	12
4	Efficient search for informational cores in complex systems: Application to brain networks. Neural Networks, 2020, 132, 232-244.	3.3	10
5	Unified framework for the entropy production and the stochastic interaction based on information geometry. Physical Review Research, 2020, 2, .	1.3	22
6	Information Geometry for Regularized Optimal Transport and Barycenters of Patterns. Neural Computation, 2019, 31, 827-848.	1.3	16
7	Statistical neurodynamics of deep networks: geometry of signal spaces. Nonlinear Theory and Its Applications IEICE, 2019, 10, 322-336.	0.4	1
8	Geometry of Information Integration. Springer Proceedings in Mathematics and Statistics, 2018, , 3-17.	0.1	3
9	Fast and exact search for the partition with minimal information loss. PLoS ONE, 2018, 13, e0201126.	1.1	20
10	Efficient Algorithms for Searching the Minimum Information Partition in Integrated Information Theory. Entropy, 2018, 20, 173.	1.1	28
11	Information geometry connecting Wasserstein distance and Kullback–Leibler divergence via the entropy-relaxed transportation problem. Information Geometry, 2018, 1, 13-37.	0.8	41
12	Conscious Perception as Integrated Information Patterns in Human Electrocorticography. ENeuro, 2017, 4, ENEURO.0085-17.2017.	0.9	28
13	Unified framework for information integration based on information geometry. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14817-14822.	3.3	92
14	Measuring Integrated Information from the Decoding Perspective. PLoS Computational Biology, 2016, 12, e1004654.	1.5	107
15	Stimulus Set Meaningfulness and Neurophysiological Differentiation: A Functional Magnetic Resonance Imaging Study. PLoS ONE, 2015, 10, e0125337.	1.1	69
16	From the Phenomenology to the Mechanisms of Consciousness: Integrated Information Theory 3.0. PLoS Computational Biology, 2014, 10, e1003588.	1.5	657
17	A Leaky-Integrator Model as a Control Mechanism Underlying Flexible Decision Making during Task Switching. PLoS ONE, 2013, 8, e59670.	1.1	7
18	Theory of correlation in a network with synaptic depression. Physical Review E, 2012, 85, 016108.	0.8	3

#	Article	IF	Citations
19	Functional Differences between Global Pre- and Postsynaptic Inhibition in the Drosophila Olfactory Circuit. Frontiers in Computational Neuroscience, 2012, 6, 14.	1.2	6
20	Information Loss Associated with Imperfect Observation and Mismatched Decoding. Frontiers in Computational Neuroscience, 2011, 5, 9.	1.2	9
21	Influence of Synaptic Depression on Memory Storage Capacity. Journal of the Physical Society of Japan, 2011, 80, 084004.	0.7	3
22	Instabilities in Associative Memory Model with Synaptic Depression and Switching Phenomena among Attractors. Journal of the Physical Society of Japan, 2010, 79, 084002.	0.7	6
23	Mechanisms of Maximum Information Preservation in the Drosophila Antennal Lobe. PLoS ONE, 2010, 5, e10644.	1.1	7
24	Mismatched Decoding in the Brain. Journal of Neuroscience, 2010, 30, 4815-4826.	1.7	34
25	Analytical investigation of the effects of lateral connections on the accuracy of population coding. Physical Review E, 2010, 81, 051905.	0.8	2
26	Mean Field Analysis of Stochastic Neural Network Models with Synaptic Depression. Journal of the Physical Society of Japan, 2010, 79, 084001.	0.7	7
27	Statistical mechanics of attractor neural network models with synaptic depression. Journal of Physics: Conference Series, 2009, 197, 012018.	0.3	2
28	Rate Reduction for Associative Memory Model in Hodgkin–Huxley-Type Network. Journal of the Physical Society of Japan, 2008, 77, 064802.	0.7	0
29	Higher Order Effects on Rate Reduction for Networks of Hodgkin–Huxley Neurons. Journal of the Physical Society of Japan, 2007, 76, 044803.	0.7	6