Marcelo A Montemurro

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7609310/publications.pdf

Version: 2024-02-01

60 papers	3,161 citations	236833 25 h-index	175177 52 g-index
60 all docs	60 docs citations	60 times ranked	3141 citing authors

#	Article	IF	Citations
1	Spike-Phase Coding Boosts and Stabilizes Information Carried by Spatial and Temporal Spike Patterns. Neuron, 2009, 61, 597-608.	3.8	427
2	Low-Frequency Local Field Potentials and Spikes in Primary Visual Cortex Convey Independent Visual Information. Journal of Neuroscience, 2008, 28, 5696-5709.	1.7	381
3	Correcting for the Sampling Bias Problem in Spike Train Information Measures. Journal of Neurophysiology, 2007, 98, 1064-1072.	0.9	368
4	Phase-of-Firing Coding of Natural Visual Stimuli in Primary Visual Cortex. Current Biology, 2008, 18, 375-380.	1.8	361
5	Beyond the Zipfâ€“Mandelbrot law in quantitative linguistics. Physica A: Statistical Mechanics and Its Applications, 2001, 300, 567-578.	1.2	199
6	Melanopsin-Driven Light Adaptation in Mouse Vision. Current Biology, 2014, 24, 2481-2490.	1.8	121
7	Information-theoretic sensitivity analysis: a general method for credit assignment in complex networks. Journal of the Royal Society Interface, 2008, 5, 223-235.	1.5	101
8	LONG-RANGE FRACTAL CORRELATIONS IN LITERARY CORPORA. Fractals, 2002, 10, 451-461.	1.8	87
9	Diverse and Temporally Precise Kinetic Feature Selectivity in the VPm Thalamic Nucleus. Neuron, 2008, 60, 890-903.	3.8	87
10	Tight Data-Robust Bounds to Mutual Information Combining Shuffling and Model Selection Techniques. Neural Computation, 2007, 19, 2913-2957.	1.3	82
11	Dynamics of Text Generation with Realistic Zipf's Distribution. Journal of Quantitative Linguistics, 2005, 12, 29-40.	0.7	78
12	Role of Precise Spike Timing in Coding of Dynamic Vibrissa Stimuli in Somatosensory Thalamus. Journal of Neurophysiology, 2007, 98, 1871-1882.	0.9	76
13	Modulation of Fast Narrowband Oscillations in the Mouse Retina and dLGN According to Background Light Intensity. Neuron, 2017, 93, 299-307.	3.8	73
14	Universal Entropy of Word Ordering Across Linguistic Families. PLoS ONE, 2011, 6, e19875.	1.1	56
15	Melanopsin-driven increases in maintained activity enhance thalamic visual response reliability across a simulated dawn. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5734-43.	3.3	48
16	Natural Language Statistical Features of LSTM-Generated Texts. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 3326-3337.	7.2	48
17	Aging in an infinite-range Hamiltonian system of coupled rotators. Physical Review E, 2003, 67, 031106.	0.8	44
18	Keywords and Co-Occurrence Patterns in the Voynich Manuscript: An Information-Theoretic Analysis. PLoS ONE, 2013, 8, e66344.	1.1	42

#	Article	IF	Citations
19	Cortical Resonance Frequencies Emerge from Network Size and Connectivity. PLoS Computational Biology, 2016, 12, e1004740.	1.5	39
20	TOWARDS THE QUANTIFICATION OF THE SEMANTIC INFORMATION ENCODED IN WRITTEN LANGUAGE. International Journal of Modeling, Simulation, and Scientific Computing, 2010, 13, 135-153.	0.9	36
21	Long range dispersal and spatial pattern formation in biological invasions. Mathematical Biosciences, 2006, 203, 155-170.	0.9	33
22	Comparing short and long-distance dispersal: modelling and field case studies. Ecography, 2011, 34, 671-682.	2.1	32
23	ENTROPIC ANALYSIS OF THE ROLE OF WORDS IN LITERARY TEXTS. International Journal of Modeling, Simulation, and Scientific Computing, 2002, 05, 7-17.	0.9	30
24	Dynamics and nonequilibrium states in the Hamiltonian mean-field model: A closer look. Physical Review E, 2003, 67, 031105.	0.8	28
25	Slow dynamics in a two-dimensional Ising model with competing interactions. Physical Review B, 2003, 68, .	1.1	26
26	Pattern Separation Underpins Expectation-Modulated Memory. Journal of Neuroscience, 2020, 40, 3455-3464.	1.7	25
27	Conversion of Phase Information into a Spike-Count Code by Bursting Neurons. PLoS ONE, 2010, 5, e9669.	1.1	24
28	Thalamic neuron models encode stimulus information by burst-size modulation. Frontiers in Computational Neuroscience, 2015, 9, 113.	1.2	22
29	Optimal Tuning Widths in Population Coding of Periodic Variables. Neural Computation, 2006, 18, 1555-1576.	1.3	21
30	Comparable ecological dynamics underlie early cancer invasion and species dispersal, involving self-organizing processes. Journal of Theoretical Biology, 2009, 256, 65-75.	0.8	20
31	A note on non-thermodynamical applications of non-extensive statistics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 324, 383-387.	0.9	18
32	Evidence for frequency-dependent cortical plasticity in the human brain. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8871-8876.	3.3	17
33	Quantifying the information in the long-range order of words: Semantic structures and universal linguistic constraints. Cortex, 2014, 55, 5-16.	1.1	14
34	Thermal measurements of stationary nonequilibrium systems: a test for generalized thermostatistics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 316, 184-189.	0.9	13
35	Bursting Neurons in the Hippocampal Formation Encode Features of LFP Rhythms. Frontiers in Computational Neuroscience, 2016, 10, 133.	1.2	13
36	Linking dynamical and functional properties of intrinsically bursting neurons. Journal of Computational Neuroscience, 2013, 35, 213-230.	0.6	11

#	Article	IF	Citations
37	FPGA Hardware Acceleration of Monte Carlo Simulations for the Ising Model. IEEE Transactions on Parallel and Distributed Systems, 2016, 27, 2618-2627.	4.0	11
38	Information coding in a laminar computational model of cat primary visual cortex. Journal of Computational Neuroscience, 2013, 34, 273-283.	0.6	8
39	Phase-locking of bursting neuronal firing to dominant LFP frequency components. BioSystems, 2015, 136, 73-79.	0.9	7
40	GABA Modulates Frequency-Dependent Plasticity in Humans. IScience, 2020, 23, 101657.	1.9	7
41	An efficient dilution strategy for constructing sparsely connected neural networks. Physica A: Statistical Mechanics and Its Applications, 2001, 294, 340-350.	1.2	5
42	Out-of-equilibrium dynamics of the Hopfield model in its spin-glass phase. Physical Review E, 2000, 62, 5721-5728.	0.8	4
43	Aging and coarsening in an ultra-thin film model. Physica A: Statistical Mechanics and Its Applications, 2006, 369, 529-534.	1.2	3
44	The statistics of meaning: Darwin, Gibbon and Moby Dick. Significance, 2009, 6, 165-169.	0.3	3
45	Coherent oscillations in word-use data from 1700 to 2008. Palgrave Communications, 2016, 2, .	4.7	3
46	AGING IN A ONE-DIMENSIONAL EDWARDSâ€“ANDERSON SPIN GLASS MODEL WITH LONG-RANGE INTERACTIONS. International Journal of Modern Physics C, 2003, 14, 257-265.	0.8	2
47	Phase-of-firing coding of dynamical whisker stimuli and the thalamocortical code in barrel cortex. BMC Neuroscience, 2013, 14, .	0.8	2
48	Homologous self-organising scale-invariant properties characterise long range species spread and cancer invasion. Nature Precedings, 2007, , .	0.1	1
49	A downward biased estimator of spike timing information. Neurocomputing, 2007, 70, 1777-1781.	3.5	1
50	Bursting neurons in the hippocampal formation convey information about LFP features. BMC Neuroscience, 2014, 15, .	0.8	1
51	Towards a Deeper Understanding of the Complex Behaviour Observed in the Distribution of Words in Written Texts. Springer Proceedings in Complexity, 2013, , 241-249.	0.2	1
52	Complexity and Universality in the Long-Range Order of Words. Lecture Notes in Morphogenesis, 2016, , 27-41.	0.2	1
53	Aging in the retrieval phase of the Hopfield model. Physica A: Statistical Mechanics and Its Applications, 2001, 295, 108-113.	1.2	0
54	Stimulus specificity of cortico-cortical connections optimizes information transmission. Neurocomputing, 2006, 69, 1203-1205.	3.5	0

#	Article	IF	Citations
55	Homologous self-organising scale-invariant properties characterise long range species spread and cancer invasion. Nature Precedings, 2007, , .	0.1	0
56	Bursting neurons encode the time-dependent phase of the input signals. BMC Neuroscience, 2009, 10, .	0.8	0
57	Quantifying the visual information sourced from melanopsin photoreceptors in mouse LGN field responses. BMC Neuroscience, 2011, 12, .	0.8	0
58	Does the information in the phase of low frequency LFP reflect the low frequency envelope of local spike rates?. BMC Neuroscience, 2011, 12, .	0.8	0
59	Phase-of-firing information coding in laminar cortical architecture. BMC Neuroscience, 2011, 12, .	0.8	0
60	Information transfer by local field potentials in the hippocampal formation. BMC Neuroscience, 2015, 16, .	0.8	0