Alexander G Dimitrov

List of Publications by Year
in descending order

37 papers	388 citations	1039406 9 h-index	839053 18 g-index
39 all docs	39 docs citations	39 times ranked	393 citing authors

#	Article	IF	Citations
1	Information Theory: Overview. , 2022, , 58-60.		0
2	Guest Editorial Biological Applications of Information Theory in Honor of Claude Shannonâ€™s Centennialâ€"Part II. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2016, 2, 117-119.	1.4	0
3	Guest Editorial Biological Applications of Information Theory in Honor of Claude Shannonâ€™s Centennialâ€"Part 1. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2016, 2, 1-4.	1.4	1
4	Invariance to frequency and time dilation along the ascending ferret auditory system. BMC Neuroscience, 2015, 16, .	0.8	0
5	Information Theory: Overview. , 2015, , 44-46.		0
6	Towards a Dynamic Clamp for Neurochemical Modalities. Sensors, 2015, 15, 10465-10480.	2.1	6
7	Design of a microfluidic device with a non-traditional flow profile for on-chip damage to zebrafish sensory cells. Journal of Micromechanics and Microengineering, 2014, 24, 017001.	1.5	6
8	Inhibition does not affect the timing code for vocalizations in the mouse auditory midbrain. Frontiers in Physiology, 2014, 5, 140.	1.3	4
9	Characterization of local invariances in the ascending ferret auditory system. BMC Neuroscience, 2014, 15, .	0.8	0
10	Design of a Microfluidic Device to Induce Noise Damage in Hair Cells of the Zebrafish Lateral Line. , 2012, , .		0
11	The Mathematical Structure of Information Bottleneck Methods. Entropy, 2012, 14, 456-479.	1.1	14
12	Characterizing the fine structure of a neural sensory code through information distortion. Journal of Computational Neuroscience, 2011, 30, 163-179.	0.6	4
13	Information theory in neuroscience. Journal of Computational Neuroscience, 2011, 30, 1-5.	0.6	95
14	Dejittering of neural responses by use of their metric properties. BMC Neuroscience, 2011, 12, .	0.8	0
15	Temporal Encoding in a Nervous System. PLoS Computational Biology, 2011, 7, e1002041.	1.5	24
16	Symmetry Breaking in Soft Clustering Decoding of Neural Codes. IEEE Transactions on Information Theory, 2010, 56, 901-927.	1.5	8
17	Evolution of Teleost Fish Retroviruses: Characterization of New Retroviruses with Cellular Genes. Journal of Virology, 2009, 83, 10152-10162.	1.5	25
18	Spatial and temporal jitter distort estimated functional properties of visual sensory neurons. Journal of Computational Neuroscience, 2009, 27, 309-319.	0.6	6

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19	Pings the Body Electric (and Means It Too). Focus on "Interval Coding. I. Burst Interspike Intervals as Indicators of Stimulus Intensity" and "Interval Coding. II. Dendrite-Dependent Mechanisms" Journal of Neurophysiology, 2007, 97, 2577-2578.	0.9	1
20	Effects of stimulus transformations on estimated functional properties of mechanosensory neurons. Neurocomputing, 2007, 70, 1772-1776.	3.5	1
21	Effects of stimulus transformations on estimates of sensory neuron selectivity. Journal of Computational Neuroscience, 2006, 20, 265-283.	0.6	22
22	Dejittered Spike-Conditioned Stimulus Waveforms Yield Improved Estimates of Neuronal Feature Selectivity and Spike-Timing Precision of Sensory Interneurons. Journal of Neuroscience, 2005, 25, 5323-5332.	1.7	48
23	Finding neural codes using random projections. Neurocomputing, 2004, 58-60, 19-25.	3.5	3
24	Spike sorting the other way. Neurocomputing, 2003, 52-54, 741-745.	3.5	1
25	Structural and biophysical mechanisms underlying dynamic sensitivity of primary sensory interneurons in the cricket cercal sensory system. Neurocomputing, 2003, 52-54, 45-52.	3.5	6
26	Transient Inability to Distinguish Between Faces: Electrophysiologic Studies. Journal of Clinical Neurophysiology, 2003, 20, 102-110.	0.9	24
27	Derivation of Natural Stimulus Feature Set Using a Data-Driven Model. Lecture Notes in Computer Science, 2003, , 337-345.	1.0	1
28	Analysis of neural coding through quantization with an information-based distortion measure. Network: Computation in Neural Systems, 2003, 14, 151-76.	2.2	7
29	Spike pattern-based coding schemes in the cricket cercal sensory system. Neurocomputing, 2002, 44-46, 373-379.	3.5	6
30	Non-uniform quantization of neural spike sequences through an information distortion measure. Neurocomputing, 2001, 38-40, 175-181.	3.5	6
31	Characterization of and compensation for the nonstationarity of spike shapes during physiological recordings. Neurocomputing, 2001, 38-40, 1695-1701.	3.5	3
32	Natural time scales for neural encoding. Neurocomputing, 2000, 32-33, 1027-1034.	3.5	9
33	Analyzing sensory systems with the information distortion function. , 2000, , 251-62.		3
34	Spatial Decorrelation in Orientation-Selective Cortical Cells. Neural Computation, 1998, 10, 1779-1795.	1.3	17
35	Edge Detectors and Texture Detectors Differ in Their Lateral Connectivity. , 1998, , 355-360.		0
36	Neural coding and decoding: communication channels and quantization. , 0, .		12

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37	Analysis of neural coding through quantization with an information-based distortion measure. , 0, .		23