Alexander G Dimitrov

List of Publications by Year
in descending order

37	388	1039406	839053
papers	citations	9 h-index	18 g-index

39	39	39	393
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Information theory in neuroscience. Journal of Computational Neuroscience, 2011, 30, 1-5.	0.6	95
2	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
3	Evolution of Teleost Fish Retroviruses: Characterization of New Retroviruses with Cellular Genes. Journal of Virology, 2009, 83, 10152-10162.	1.5	25
4	Transient Inability to Distinguish Between Faces: Electrophysiologic Studies. Journal of Clinical Neurophysiology, 2003, 20, 102-110.	0.9	24
5	Temporal Encoding in a Nervous System. PLoS Computational Biology, 2011, 7, e1002041.	1.5	24
6	Analysis of neural coding through quantization with an information-based distortion measure. , 0, .		23
7	Effects of stimulus transformations on estimates of sensory neuron selectivity. Journal of Computational Neuroscience, 2006, 20, 265-283.	0.6	22
8	Spatial Decorrelation in Orientation-Selective Cortical Cells. Neural Computation, 1998, 10, 1779-1795.	1.3	17
9	The Mathematical Structure of Information Bottleneck Methods. Entropy, 2012, 14, 456-479.	1.1	14
10	Neural coding and decoding: communication channels and quantization. , 0, .		12
11	Natural time scales for neural encoding. Neurocomputing, 2000, 32-33, 1027-1034.	3.5	9
12	Symmetry Breaking in Soft Clustering Decoding of Neural Codes. IEEE Transactions on Information Theory, 2010, 56, 901-927.	1.5	8
13	Analysis of neural coding through quantization with an information-based distortion measure. Network: Computation in Neural Systems, 2003, 14, 151-76.	2.2	7
14	Non-uniform quantization of neural spike sequences through an information distortion measure. Neurocomputing, 2001, 38-40, 175-181.	3.5	6
15	Spike pattern-based coding schemes in the cricket cercal sensory system. Neurocomputing, 2002, 44-46, 373-379.	3.5	6
16	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
17	Spatial and temporal jitter distort estimated functional properties of visual sensory neurons. Journal of Computational Neuroscience, 2009, 27, 309-319.	0.6	6
18	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

#	Article	IF	Citations
19	Towards a Dynamic Clamp for Neurochemical Modalities. Sensors, 2015, 15, 10465-10480.	2.1	6
20	Characterizing the fine structure of a neural sensory code through information distortion. Journal of Computational Neuroscience, 2011, 30, 163-179.	0.6	4
21	Inhibition does not affect the timing code for vocalizations in the mouse auditory midbrain. Frontiers in Physiology, 2014, 5, 140.	1.3	4
22	Characterization of and compensation for the nonstationarity of spike shapes during physiological recordings. Neurocomputing, 2001, 38-40, 1695-1701.	3.5	3
23	Finding neural codes using random projections. Neurocomputing, 2004, 58-60, 19-25.	3.5	3
24	Analyzing sensory systems with the information distortion function. , 2000, , 251-62.		3
25	Spike sorting the other way. Neurocomputing, 2003, 52-54, 741-745.	3.5	1
26	Pings the Body Electric (and Means It Too). Focus on â€œInterval Coding. I. Burst Interspike Intervals as Indicators of Stimulus Intensityâ€•and â€œInterval Coding. II. Dendrite-Dependent Mechanismsâ€• Journal of Neurophysiology, 2007, 97, 2577-2578.	0.9	1
27	Effects of stimulus transformations on estimated functional properties of mechanosensory neurons. Neurocomputing, 2007, 70, 1772-1776.	3.5	1
28	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
29	Derivation of Natural Stimulus Feature Set Using a Data-Driven Model. Lecture Notes in Computer Science, 2003, , 337-345.	1.0	1
30	Dejittering of neural responses by use of their metric properties. BMC Neuroscience, 2011, 12, .	0.8	0
31	Design of a Microfluidic Device to Induce Noise Damage in Hair Cells of the Zebrafish Lateral Line. , 2012, , .		0
32	Characterization of local invariances in the ascending ferret auditory system. BMC Neuroscience, 2014, 15, .	0.8	0
33	Invariance to frequency and time dilation along the ascending ferret auditory system. BMC Neuroscience, 2015, 16, .	0.8	0
34	Information Theory: Overview. , 2015, , 44-46.		0
35	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
36	Edge Detectors and Texture Detectors Differ in Their Lateral Connectivity. , 1998, , 355-360.		0

#	Article	IF	Citations
37	Information Theory: Overview. , 2022, , 58-60.		0