Ben D B Willmore

List of Publications by Year
in descending order

28	1,446	18	25
papers	citations	h-index (430442)	g-index (580395)

36	36	36	1250
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simple transformations capture auditory input to cortex. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28442-28451.	3.3	27
2	Contrast gain control occurs independently of both parvalbumin-positive interneuron activity and shunting inhibition in auditory cortex. Journal of Neurophysiology, 2020, 123, 1536-1551.	0.9	17
3	Neural circuits underlying auditory contrast gain control and their perceptual implications. Nature Communications, 2020, 11, 324.	5.8	47
4	A dynamic network model of temporal receptive fields in primary auditory cortex. PLoS Computational Biology, 2019, 15, e1006618.	1.5	18
5	Recent advances in understanding the auditory cortex. F1000Research, 2018, 7, 1555.	0.8	49
6	Sensory cortex is optimized for prediction of future input. ELife, 2018, 7, .	2.8	53
7	Contrast gain control in mouse auditory cortex. Journal of Neurophysiology, 2018, 120, 1872-1884.	0.9	30
8	Measuring the Performance of Neural Models. Frontiers in Computational Neuroscience, 2016, 10, 10.	1.2	70
9	Network Receptive Field Modeling Reveals Extensive Integration and Multi-feature Selectivity in Auditory Cortical Neurons. PLoS Computational Biology, 2016, 12, e1005113.	1.5	56
10	Incorporating Midbrain Adaptation to Mean Sound Level Improves Models of Auditory Cortical Processing. Journal of Neuroscience, 2016, 36, 280-289.	1.7	47
11	Hearing in noisy environments: noise invariance and contrast gain control. Journal of Physiology, 2014, 592, 3371-3381.	1.3	39
12	Temporal predictability as a grouping cue in the perception of auditory streams. Journal of the Acoustical Society of America, 2013, 134, EL98-EL104.	0.5	18
13	Constructing Noise-Invariant Representations of Sound in the Auditory Pathway. PLoS Biology, 2013, 11, e1001710.	2.6	130
14	Spectrotemporal Contrast Kernels for Neurons in Primary Auditory Cortex. Journal of Neuroscience, 2012, 32, 11271-11284.	1.7	68
15	Contrast normalization contributes to a biologically-plausible model of receptive-field development in primary visual cortex (V1). Vision Research, 2012, 54, 49-60.	0.7	12
16	Contrast Gain Control in Auditory Cortex. Neuron, 2011, 70, 1178-1191.	3.8	233
17	Object Vision: A Matter of Principle. Current Biology, 2011, 21, R153-R155.	1.8	0
18	Sparse coding in striate and extrastriate visual cortex. Journal of Neurophysiology, 2011, 105, 2907-2919.	0.9	78

#	Article	IF	Citations
19	Neural Representation of Natural Images in Visual Area V2. Journal of Neuroscience, 2010, 30, 2102-2114.	1.7	98
20	Auditory Cortex: Representation through Sparsification?. Current Biology, 2009, 19, R1123-R1125.	1.8	8
21	The Berkeley Wavelet Transform: A Biologically Inspired Orthogonal Wavelet Transform. Neural Computation, 2008, 20, 1537-1564.	1.3	31
22	Independent Components of Color Natural Scenes Resemble V1 Neurons in Their Spatial and Color Tuning. Journal of Neurophysiology, 2004, 91, 2859-2873.	0.9	81
23	Methods for first-order kernel estimation: simple-cell receptive fields from responses to natural scenes. Network: Computation in Neural Systems, 2003, 14, 553-577.	2.2	34
24	The Receptive-Field Organization of Simple Cells in Primary Visual Cortex of Ferrets under Natural Scene Stimulation. Journal of Neuroscience, 2003, 23, 4746-4759.	1.7	114
25	Methods for first-order kernel estimation: simple-cell receptive fields from responses to natural scenes. Network: Computation in Neural Systems, 2003, 14, 553-77.	2.2	14
26	A Comparison of Natural-Image-Based Models of Simple-Cell Coding. Perception, 2000, 29, 1017-1040.	0.5	30
27	Methods for first-order kernel estimation: simple-cell receptive fields from responses to natural scenes. , 0, .		16
28	Cortical adaptation to sound reverberation. ELife, 0, 11, .	2.8	7