Yang Dan

List of Publications by Year
in descending order

95 papers	16,556 citations	25014 57 h-index	46771 89 g-index
107 all docs	107 docs citations	107 times ranked	13765 citing authors

#	Article	IF	Citations
1	Spike Timingâ€“Dependent Plasticity: A Hebbian Learning Rule. Annual Review of Neuroscience, 2008, 31, 25-46.	5.0	1,490
2	Spike Timing-Dependent Plasticity of Neural Circuits. Neuron, 2004, 44, 23-30.	3.8	899
3	Spike-timing-dependent synaptic modification induced by natural spike trains. Nature, 2002, 416, 433-438.	13.7	702
4	Long-range and local circuits for top-down modulation of visual cortex processing. Science, 2014, 345, 660-665.	6.0	688
5	Spike Timing-Dependent Plasticity: From Synapse to Perception. Physiological Reviews, 2006, 86, 1033-1048.	13.1	574
6	Do We Know What the Early Visual System Does?. Journal of Neuroscience, 2005, 25, 10577-10597.	1.7	563
7	Activation of specific interneurons improves V1 feature selectivity and visual perception. Nature, 2012, 488, 379-383.	13.7	530
8	Neuromodulation of Brain States. Neuron, 2012, 76, 209-222.	3.8	515
9	Removing Brakes on Adult Brain Plasticity: From Molecular to Behavioral Interventions. Journal of Neuroscience, 2010, 30, 14964-14971.	1.7	506
10	Basal forebrain activation enhances cortical coding of natural scenes. Nature Neuroscience, 2009, 12, 1444-1449.	7.1	500
11	Fast modulation of visual perception by basal forebrain cholinergic neurons. Nature Neuroscience, 2013, 16, 1857-1863.	7.1	489
12	Basal forebrain circuit for sleep-wake control. Nature Neuroscience, 2015, 18, 1641-1647.	7.1	405
13	Efficient Coding of Natural Scenes in the Lateral Geniculate Nucleus: Experimental Test of a Computational Theory. Journal of Neuroscience, 1996, 16, 3351-3362.	1.7	397
14	Spike-timing-dependent synaptic plasticity depends on dendritic location. Nature, 2005, 434, 221-225.	13.7	354
15	Circuit-based interrogation of sleep control. Nature, 2016, 538, 51-59.	13.7	307
16	Cell-Type-Specific Activity in Prefrontal Cortex during Goal-Directed Behavior. Neuron, 2015, 87, 437-450.	3.8	298
17	Reconstruction of Natural Scenes from Ensemble Responses in the Lateral Geniculate Nucleus. Journal of Neuroscience, 1999, 19, 8036-8042.	1.7	282
18	What is memory? The present state of the engram. BMC Biology, 2016, 14, 40.	1.7	277

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19	Identification of preoptic sleep neurons using retrograde labelling and gene profiling. Nature, 2017, 545, 477-481.	13.7	246
20	A natural approach to studying vision. Nature Neuroscience, 2005, 8, 1643-1646.	7.1	237
21	Burst Spiking of a Single Cortical Neuron Modifies Global Brain State. Science, 2009, 324, 643-646.	6.0	236
22	Control of REM sleep by ventral medulla GABAergic neurons. Nature, 2015, 526, 435-438.	13.7	234
23	Reverberation of Recent Visual Experience in Spontaneous Cortical Waves. Neuron, 2008, 60, 321-327.	3.8	228
24	Organization of long-range inputs and outputs of frontal cortex for top-down control. Nature Neuroscience, 2016, 19, 1733-1742.	7.1	214
25	Stimulus Timing-Dependent Plasticity in Cortical Processing of Orientation. Neuron, 2001, 32, 315-323.	3.8	210
26	Clonally related visual cortical neurons show similar stimulus feature selectivity. Nature, 2012, 486, 118-121.	13.7	208
27	Delay activity of specific prefrontal interneuron subtypes modulates memory-guided behavior. Nature Neuroscience, 2017, 20, 854-863.	7.1	186
28	Contribution of Individual Spikes in Burst-Induced Long-Term Synaptic Modification. Journal of Neurophysiology, 2006, 95, 1620-1629.	0.9	182
29	Spatial Structure of Complex Cell Receptive Fields Measured with Natural Images. Neuron, 2005, 45, 781-791.	3.8	177
30	Experience-Dependent Plasticity in Adult Visual Cortex. Neuron, 2006, 52, 577-585.	3.8	170
31	LiGluR Restores Visual Responses in Rodent Models of Inherited Blindness. Molecular Therapy, 2011, 19, 1212-1219.	3.7	168
32	Receptive-Field Modification in Rat Visual Cortex Induced by Paired Visual Stimulation and Single-Cell Spiking. Neuron, 2006, 49, 183-189.	3.8	158
33	Activity recall in a visual cortical ensemble. Nature Neuroscience, 2012, 15, 449-455.	7.1	151
34	Isolation of Relevant Visual Features from Random Stimuli for Cortical Complex Cells. Journal of Neuroscience, 2002, 22, 10811-10818.	1.7	147
35	Regulation of REM and Non-REM Sleep by Periaqueductal GABAergic Neurons. Nature Communications, 2018, 9, 354.	5.8	136
36	Temporal Specificity in the Cortical Plasticity of Visual Space Representation. Science, 2002, 296, 1999-2003.	6.0	134

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37	Cortical Sensitivity to Visual Features in Natural Scenes. PLoS Biology, 2005, 3, e342.	2.6	132
38	Representation of interval timing by temporally scalable firing patterns in rat prefrontal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 480-485.	3.3	126
39	A Motor Theory of Sleep-Wake Control: Arousal-Action Circuit. Annual Review of Neuroscience, 2019, 42, 27-46.	5.0	125
40	Optogenetics: 10 years after ChR2 in neuronsâ€”views from the community. Nature Neuroscience, 2015, 18, 1202-1212.	7.1	122
41	Cell-type-specific modulation of neocortical activity by basal forebrain input. Frontiers in Systems Neuroscience, 2012, 6, 79.	1.2	120
42	Cell type-specific long-range connections of basal forebrain circuit. ELife, 2016, 5, .	2.8	119
43	Dynamic Modification of Cortical Orientation Tuning Mediated by Recurrent Connections. Neuron, 2002, 36, 945-954.	3.8	118
44	Asymmetry in Visual Cortical Circuits Underlying Motion-Induced Perceptual Mislocalization. Journal of Neuroscience, 2004, 24, 2165-2171.	1.7	116
45	Dissection of Cortical Microcircuits by Single-Neuron Stimulation InÂVivo. Current Biology, 2012, 22, 1459-1467.	1.8	113
46	An arithmetic rule for spatial summation of excitatory and inhibitory inputs in pyramidal neurons. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21906-21911.	3.3	112
47	Calcium imaging of sleepâ€“wake related neuronal activity in the dorsal pons. Nature Communications, 2016, 7, 10763.	5.8	110
48	A Hypothalamic Switch for REM and Non-REM Sleep. Neuron, 2018, 97, 1168-1176.e4.	3.8	106
49	Rapid learning in cortical coding of visual scenes. Nature Neuroscience, 2007, 10, 772-778.	7.1	105
50	Interneuron subtypes and orientation tuning. Nature, 2014, 508, E1-E2.	13.7	96
51	Quantal transmitter secretion from myocytes loaded with acetylcholine. Nature, 1992, 359, 733-736.	13.7	93
52	Cholinergic shaping of neural correlations. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5725-5730.	3.3	89
53	Standardized and reproducible measurement of decision-making in mice. ELife, 2021, 10, .	2.8	88
54	Blocking PirB up-regulates spines and functional synapses to unlock visual cortical plasticity and facilitate recovery from amblyopia. Science Translational Medicine, 2014, 6, 258ra140.	5.8	86

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55	A common hub for sleep and motor control in the substantia nigra. Science, 2020, 367, 440-445.	6.0	86
56	Calcium Imaging of Basal Forebrain Activity during Innate and Learned Behaviors. Frontiers in Neural Circuits, 2016, 10, 36.	1.4	75
57	Motion-Induced Perceptual Extrapolation of Blurred Visual Targets. Journal of Neuroscience, 2001, 21, RC172-RC172.	1.7	69
58	Excitatory and suppressive receptive field subunits in awake monkey primary visual cortex (V1). Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19120-19125.	3.3	69
59	Stimulation of non-classical receptive field enhances orientation selectivity in the cat. Journal of Physiology, 2005, 564, 233-243.	1.3	62
60	An International Laboratory for Systems and Computational Neuroscience. Neuron, 2017, 96, 1213-1218.	3.8	60
61	Prefrontal Corticotectal Neurons Enhance Visual Processing through the Superior Colliculus and Pulvinar Thalamus. Neuron, 2019, 104, 1141-1152.e4.	3.8	58
62	Computational subunits of visual cortical neurons revealed by artificial neural networks. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 8974-8979.	3.3	57
63	A database and deep learning toolbox for noise-optimized, generalized spike inference from calcium imaging. Nature Neuroscience, 2021, 24, 1324-1337.	7.1	57
64	An Excitatory Circuit in the Perioculomotor Midbrain for Non-REM Sleep Control. Cell, 2019, 177, 1293-1307.e16.	13.5	54
65	Function of inhibition in visual cortical processing. Current Opinion in Neurobiology, 2010, 20, 340-346.	2.0	53
66	Synaptic Mechanisms of Direction Selectivity in Primary Auditory Cortex. Journal of Neuroscience, 2010, 30, 1861-1868.	1.7	53
67	Retrograde interactions during formation and elimination of neuromuscular synapses. Current Opinion in Neurobiology, 1994, 4, 95-100.	2.0	49
68	Intracortical mechanism of stimulus-timing-dependent plasticity in visual cortical orientation tuning. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5081-5086.	3.3	48
69	Robust, automated sleep scoring by a compact neural network with distributional shift correction. PLoS ONE, 2019, 14, e0224642.	1.1	45
70	Control of Non-REM Sleep by Midbrain Neurotensinergic Neurons. Neuron, 2019, 104, 795-809.e6.	3.8	43
71	Sleep Regulation by Neurotensinergic Neurons in a Thalamo-Amygdala Circuit. Neuron, 2019, 103, 323-334.e7.	3.8	43
72	Inhibition of impulsive action by projection-defined prefrontal pyramidal neurons. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17278-17287.	3.3	41

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73	Evoked neuronal secretion of false transmitters. Neuron, 1994, 13, 909-917.	3.8	39
74	Entrainment of Slow Oscillations of Auditory Thalamic Neurons by Repetitive Sound Stimuli. Journal of Neuroscience, 2009, 29, 6013-6021.	1.7	39
75	Postsynaptic Elevation of Calcium Induces Persistent Depression of Developing Neuromuscular Synapses. Neuron, 1996, 16, 745-754.	3.8	37
76	Contextual modulation of orientation tuning contributes to efficient processing of natural stimuli. Network: Computation in Neural Systems, 2005, 16, 139-149.	2.2	37
77	Spatial structure of neuronal receptive field in awake monkey secondary visual cortex (V2). Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1913-1918.	3.3	30
78	Synaptic Learning Rules, Cortical Circuits, and Visual Function. Neuroscientist, 2005, 11, 206-216.	2.6	20
79	Priming with real motion biases visual cortical response to bistable apparent motion. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20691-20696.	3.3	18
80	An inferior-superior colliculus circuit controls auditory cue-directed visual spatial attention. Neuron, 2022, 110, 109-119.e3.	3.8	15
81	Calcium-dependent postsynaptic exocytosis: A possible mechanism for activity-dependent synaptic modulation. Journal of Neurobiology, 1994, 25, 336-341.	3.7	12
82	Chapter 19 Plasticity of developing neuromuscular synapses. Progress in Brain Research, 1995, 105, 211-215.	0.9	10
83	A new neural probe using SOI wafers with topological interlocking mechanisms. , 0, , .		8
84	Periodic stimulation induces longâ€range modulation of cortical responses and visual perception. Journal of Physiology, 2011, 589, 3125-3133.	1.3	8
85	Asymmetric Temporal Integration of Layer 4 and Layer 2/3 Inputs in Visual Cortex. Journal of Neurophysiology, 2011, 105, 347-355.	0.9	4
86	A Form of Presynaptic Coincidence Detection. Neuron, 2003, 39, 579-581.	3.8	2
87	Sensory systems. Current Opinion in Neurobiology, 2006, 16, 359-362.	2.0	2
88	One Circuit, Two Kinds of Timing. Neuron, 2005, 48, 165-166.	3.8	1
89	Editorial overview: Neurobiology of sleep 2017. Current Opinion in Neurobiology, 2017, 44, A1-A3.	2.0	1
90	Reply to Namboodiri and Hussain Shuler: Analysis of scaling of neuronal activities in medial prefrontal cortex during interval timing. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2240-E2240.	3.3	0

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91	Spike Timing and Visual Cortical Plasticity. , 2003, , 255-267.		0
92	Robust, automated sleep scoring by a compact neural network with distributional shift correction. , 2019, 14, e0224642.		0
93	Robust, automated sleep scoring by a compact neural network with distributional shift correction. , 2019, 14, e0224642.		0
94	Robust, automated sleep scoring by a compact neural network with distributional shift correction. , 2019, 14, e0224642.		0
95	Robust, automated sleep scoring by a compact neural network with distributional shift correction. , 2019, 14, e0224642.		0