Peter J Magill

List of Publications by Year
in descending order

58	9,153	66343	149698
papers	citations	42 h-index	56 g-index

69	69	69	7585
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Brain-state- and cell-type-specific firing of hippocampal interneurons in vivo. Nature, 2003, 421, 844-848.	27.8	1,187
2	Uniform Inhibition of Dopamine Neurons in the Ventral Tegmental Area by Aversive Stimuli. Science, 2004, 303, 2040-2042.	12.6	723
3	Move to the rhythm: oscillations in the subthalamic nucleusâ€“external globus pallidus network. Trends in Neurosciences, 2002, 25, 525-531.	8.6	579
4	Disrupted Dopamine Transmission and the Emergence of Exaggerated Beta Oscillations in Subthalamic Nucleus and Cerebral Cortex. Journal of Neuroscience, 2008, 28, 4795-4806.	3.6	413
5	Parkinsonian Beta Oscillations in the External Globus Pallidus and Their Relationship with Subthalamic Nucleus Activity. Journal of Neuroscience, 2008, 28, 14245-14258.	3.6	392
6	Dichotomous Organization of the External Globus Pallidus. Neuron, 2012, 74, 1075-1086.	8.1	367
7	Dopamine depletion increases the power and coherence of Î²-oscillations in the cerebral cortex and subthalamic nucleus of the awake rat. European Journal of Neuroscience, 2005, 21, 1413-1422.	2.6	352
8	Spike timing of dendrite-targeting bistratified cells during hippocampal network oscillations in vivo. Nature Neuroscience, 2004, 7, 41-47.	14.8	339
9	Pedunculopontine nucleus and basal ganglia: distant relatives or part of the same family?. Trends in Neurosciences, 2004, 27, 585-588.	8.6	304
10	Relationship of Activity in the Subthalamic Nucleusâ€“Globus Pallidus Network to Cortical Electroencephalogram. Journal of Neuroscience, 2000, 20, 820-833.	3.6	293
11	Deficits in dopaminergic transmission precede neuron loss and dysfunction in a new Parkinson model. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E4016-25.	7.1	259
12	Prototypic and Arkypallidal Neurons in the Dopamine-Intact External Globus Pallidus. Journal of Neuroscience, 2015, 35, 6667-6688.	3.6	200
13	Inhibition of 5-HT neuron activity and induction of depressive-like behavior by high-frequency stimulation of the subthalamic nucleus. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17087-17092.	7.1	190
14	K-ATP channels in dopamine substantia nigra neurons control bursting and novelty-induced exploration. Nature Neuroscience, 2012, 15, 1272-1280.	14.8	178
15	Action initiation shapes mesolimbic dopamine encoding of future rewards. Nature Neuroscience, 2016, 19, 34-36.	14.8	177
16	Cholinergic brainstem neurons modulate cortical gamma activity during slow oscillations. Journal of Physiology, 2008, 586, 2947-2960.	2.9	175
17	Alterations in Brain Connectivity Underlying Beta Oscillations in Parkinsonism. PLoS Computational Biology, 2011, 7, e1002124.	3.2	160
18	Synchronous Unit Activity and Local Field Potentials Evoked in the Subthalamic Nucleus by Cortical Stimulation. Journal of Neurophysiology, 2004, 92, 700-714.	1.8	149

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19	Cell-Type-Specific Recruitment of Amygdala Interneurons to Hippocampal Theta Rhythm and Noxious Stimuli InÂVivo. Neuron, 2012, 74, 1059-1074.	8.1	145
20	Representation of spontaneous movement by dopaminergic neurons is cell-type selective and disrupted in parkinsonism. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2180-8.	7.1	145
21	Novel and Distinct Operational Principles of Intralaminar Thalamic Neurons and Their Striatal Projections. Journal of Neuroscience, 2007, 27, 4374-4384.	3.6	144
22	Distinct Developmental Origins Manifest in the Specialized Encoding of Movement by Adult Neurons of the External Globus Pallidus. Neuron, 2015, 86, 501-513.	8.1	127
23	Structural correlates of heterogeneous in vivo activity of midbrain dopaminergic neurons. Nature Neuroscience, 2012, 15, 613-619.	14.8	125
24	A Single-Cell Analysis of Intrinsic Connectivity in the Rat Globus Pallidus. Journal of Neuroscience, 2007, 27, 6352-6362.	3.6	121
25	Cortical and Thalamic Excitation Mediate the Multiphasic Responses of Striatal Cholinergic Interneurons to Motivationally Salient Stimuli. Journal of Neuroscience, 2014, 34, 3101-3117.	3.6	111
26	A Hippocampus-Accumbens Tripartite Neuronal Motif Guides Appetitive Memory in Space. Cell, 2019, 176, 1393-1406.e16.	28.9	109
27	Brain Stateâ€“Dependency of Coherent Oscillatory Activity in the Cerebral Cortex and Basal Ganglia of the Rat. Journal of Neurophysiology, 2004, 92, 2122-2136.	1.8	102
28	Oscillatory Local Field Potentials Recorded from the Subthalamic Nucleus of the Alert Rat. Experimental Neurology, 2002, 177, 581-585.	4.1	101
29	A Population of Indirect Pathway Striatal Projection Neurons Is Selectively Entrained to Parkinsonian Beta Oscillations. Journal of Neuroscience, 2017, 37, 9977-9998.	3.6	98
30	Temporal evolution of beta bursts in the parkinsonian cortical and basal ganglia network. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16095-16104.	7.1	98
31	Activity of Neurochemically Heterogeneous Dopaminergic Neurons in the Substantia Nigra during Spontaneous and Driven Changes in Brain State. Journal of Neuroscience, 2009, 29, 2915-2925.	3.6	91
32	Sparse but Selective and Potent Synaptic Transmission From the Globus Pallidus to the Subthalamic Nucleus. Journal of Neurophysiology, 2009, 102, 532-545.	1.8	90
33	Equilibrium Potential of GABA_A Current and Implications for Rebound Burst Firing in Rat Subthalamic Neurons In Vitro. Journal of Neurophysiology, 2000, 83, 3169-3172.	1.8	88
34	Relationships between the Firing of Identified Striatal Interneurons and Spontaneous and Driven Cortical ActivitiesIn Vivo. Journal of Neuroscience, 2012, 32, 13221-13236.	3.6	85
35	Effective connectivity of the subthalamic nucleusâ€“globus pallidus network during Parkinsonian oscillations. Journal of Physiology, 2014, 592, 1429-1455.	2.9	84
36	Directional analysis of coherent oscillatory field potentials in the cerebral cortex and basal ganglia of the rat. Journal of Physiology, 2005, 562, 951-963.	2.9	79

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37	Changes in Functional Connectivity within the Rat Striatopallidal Axis during Global Brain Activation In Vivo. Journal of Neuroscience, 2006, 26, 6318-6329.	3.6	68
38	Transcription factors FOXA1 and FOXA2 maintain dopaminergic neuronal properties and control feeding behavior in adult mice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4929-38.	7.1	66
39	Propagation of beta/gamma rhythms in the cortico-basal ganglia circuits of the parkinsonian rat. Journal of Neurophysiology, 2018, 119, 1608-1628.	1.8	62
40	LRRK2BAC transgenic rats develop progressive, L-DOPA-responsive motor impairment, and deficits in dopamine circuit function. Human Molecular Genetics, 2016, 25, 951-963.	2.9	58
41	Effects of dopamine depletion on information flow between the subthalamic nucleus and external globus pallidus. Journal of Neurophysiology, 2011, 106, 2012-2023.	1.8	49
42	Temporal Coupling with Cortex Distinguishes Spontaneous Neuronal Activities in Identified Basal Ganglia-Recipient and Cerebellar-Recipient Zones of the Motor Thalamus. Cerebral Cortex, 2014, 24, 81-97.	2.9	49
43	Effects of Dopamine Depletion on Network Entropy in the External Globus Pallidus. Journal of Neurophysiology, 2009, 102, 1092-1102.	1.8	46
44	Large Intercalated Neurons of Amygdala Relay Noxious Sensory Information. Journal of Neuroscience, 2015, 35, 2044-2057.	3.6	44
45	Tsc1-mTORC1 signaling controls striatal dopamine release and cognitive flexibility. Nature Communications, 2019, 10, 5426.	12.8	44
46	Secretagogin expression delineates functionally-specialized populations of striatal parvalbumin-containing interneurons. ELife, 2016, 5, .	6.0	43
47	Oscillations in the Basal Ganglia: The good, the bad, and the unexpected. , 2005, , 1-24.		37
48	Increased electrical and metabolic activity in the dorsal raphe nucleus of Parkinsonian rats. Brain Research, 2008, 1221, 93-97.	2.2	32
49	GABA uptake transporters support dopamine release in dorsal striatum with maladaptive downregulation in a parkinsonism model. Nature Communications, 2020, 11, 4958.	12.8	31
50	Properties of Neurons in External Globus Pallidus Can Support Optimal Action Selection. PLoS Computational Biology, 2016, 12, e1005004.	3.2	30
51	Delayed synchronization of activity in cortex and subthalamic nucleus following cortical stimulation in the rat. Journal of Physiology, 2006, 574, 929-946.	2.9	26
52	Thalamocortical dynamics underlying spontaneous transitions in beta power in Parkinsonism. NeuroImage, 2019, 193, 103-114.	4.2	21
53	Stereological and ultrastructural quantification of the afferent synaptome of individual neurons. Brain Structure and Function, 2014, 219, 631-640.	2.3	12
54	Structural and molecular heterogeneity of calretininâ€expressing interneurons in the rodent and primate striatum. Journal of Comparative Neurology, 2018, 526, 877-898.	1.6	12

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55	Stimulating at the right time to recover network states in a model of the cortico-basal ganglia-thalamic circuit. PLoS Computational Biology, 2022, 18, e1009887.	3.2	12
56	Input Zone-Selective Dysrhythmia in Motor Thalamus after Dopamine Depletion. Journal of Neuroscience, 2021, 41, 10382-10404.	3.6	7
57	The Pedunculopontine Nucleus. , 2005, , 533-544.		4
58	The Functional Organisation of the Basal Ganglia: New Insights from Anatomical and Physiological Analyses. Advances in Behavioral Biology, 2002, , 371-378.	0.2	4