Hagai Bergman

List of Publications by Year
in descending order

178 papers	21,320 citations	20817 60 h-index	10158 140 g-index
200 all docs	200 docs citations	200 times ranked	13540 citing authors

#	Article	IF	Citations
1	Reversal of Experimental Parkinsonism by Lesions of the Subthalamic Nucleus. Science, 1990, 249, 1436-1438.	12.6	1,845
2	Pathological synchronization in Parkinson's disease: networks, models and treatments. Trends in Neurosciences, 2007, 30, 357-364.	8.6	1,399
3	The primate subthalamic nucleus. II. Neuronal activity in the MPTP model of parkinsonism. Journal of Neurophysiology, 1994, 72, 507-520.	1.8	1,260
4	Goal-directed and habitual control in the basal ganglia: implications for Parkinson's disease. Nature Reviews Neuroscience, 2010, 11, 760-772.	10.2	869
5	Dynamics of neuronal interactions in monkey cortex in relation to behavioural events. Nature, 1995, 373, 515-518.	27.8	821
6	Deep brain stimulation: current challenges and future directions. Nature Reviews Neurology, 2019, 15, 148-160.	10.1	721
7	Closed-Loop Deep Brain Stimulation Is Superior in Ameliorating Parkinsonism. Neuron, 2011, 72, 370-384.	8.1	705
8	Past, present, and future of Parkinson's disease: A special essay on the 200th Anniversary of the Shaking Palsy. Movement Disorders, 2017, 32, 1264-1310.	3.9	608
9	Neurons in the globus pallidus do not show correlated activity in the normal monkey, but phase-locked oscillations appear in the MPTP model of parkinsonism. Journal of Neurophysiology, 1995, 74, 1800-1805.	1.8	604
10	Physiological aspects of information processing in the basal ganglia of normal and parkinsonian primates. Trends in Neurosciences, 1998, 21, 32-38.	8.6	562
11	Firing Patterns and Correlations of Spontaneous Discharge of Pallidal Neurons in the Normal and the Tremulous 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine Vervet Model of Parkinsonism. Journal of Neuroscience, 2000, 20, 8559-8571.	3.6	520
12	Coincident but Distinct Messages of Midbrain Dopamine and Striatal Tonically Active Neurons. Neuron, 2004, 43, 133-143.	8.1	481
13	Midbrain dopamine neurons encode decisions for future action. Nature Neuroscience, 2006, 9, 1057-1063.	14.8	403
14	Dependence of cortical plasticity on correlated activity of single neurons and on behavioral context. Science, 1992, 257, 1412-1415.	12.6	389
15	The primate subthalamic nucleus. III. Changes in motor behavior and neuronal activity in the internal pallidum induced by subthalamic inactivation in the MPTP model of parkinsonism. Journal of Neurophysiology, 1994, 72, 521-530.	1.8	388
16	Information processing, dimensionality reduction and reinforcement learning in the basal ganglia. Progress in Neurobiology, 2003, 71, 439-473.	5.7	347
17	The primate subthalamic nucleus. I. Functional properties in intact animals. Journal of Neurophysiology, 1994, 72, 494-506.	1.8	346
18	Competition between Feedback Loops Underlies Normal and Pathological Dynamics in the Basal Ganglia. Journal of Neuroscience, 2006, 26, 3567-3583.	3.6	289

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19	Spatiotemporal Structure of Cortical Activity: Properties and Behavioral Relevance. Journal of Neurophysiology, 1998, 79, 2857-2874.	1.8	274
20	Comparison of MPTP-induced changes in spontaneous neuronal discharge in the internal pallidal segment and in the substantia nigra pars reticulata in primates. Experimental Brain Research, 1999, 125, 397-409.	1.5	274
21	Subthalamic span of Â oscillations predicts deep brain stimulation efficacy for patients with Parkinson's disease. Brain, 2010, 133, 2007-2021.	7.6	262
22	Enhanced Synchrony among Primary Motor Cortex Neurons in the 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine Primate Model of Parkinson's Disease. Journal of Neuroscience, 2002, 22, 4639-4653.	3.6	260
23	Pathophysiology of Parkinson's disease: From clinical neurology to basic neuroscience and back. Movement Disorders, 2002, 17, S28-S40.	3.9	256
24	Neuronal synchronization of tonically active neurons in the striatum of normal and parkinsonian primates. Journal of Neurophysiology, 1996, 76, 2083-2088.	1.8	240
25	Midbrain Dopaminergic Neurons and Striatal Cholinergic Interneurons Encode the Difference between Reward and Aversive Events at Different Epochs of Probabilistic Classical Conditioning Trials. Journal of Neuroscience, 2008, 28, 11673-11684.	3.6	240
26	Insights into the mechanisms of deep brain stimulation. Nature Reviews Neurology, 2017, 13, 548-554.	10.1	240
27	Spike Synchronization in the Cortex-Basal Ganglia Networks of Parkinsonian Primates Reflects Global Dynamics of the Local Field Potentials. Journal of Neuroscience, 2004, 24, 6003-6010.	3.6	205
28	Basal ganglia oscillations and pathophysiology of movement disorders. Current Opinion in Neurobiology, 2006, 16, 629-637.	4.2	196
29	Mutations in the histone methyltransferase gene KMT2B cause complex early-onset dystonia. Nature Genetics, 2017, 49, 223-237.	21.4	186
30	Subthalamic nucleus functional organization revealed by parkinsonian neuronal oscillations and synchrony. Brain, 2008, 131, 3395-3409.	7.6	182
31	Activity of Pallidal and Striatal Tonically Active Neurons Is Correlated in MPTP-Treated Monkeys But Not in Normal Monkeys. Journal of Neuroscience, 2001, 21, RC128-RC128.	3.6	181
32	Stepping out of the box: information processing in the neural networks of the basal ganglia. Current Opinion in Neurobiology, 2001, 11, 689-695.	4.2	176
33	Preparatory activity in motor cortex reflects learning of local visuomotor skills. Nature Neuroscience, 2003, 6, 882-890.	14.8	174
34	Long Non-Coding RNA and Alternative Splicing Modulations in Parkinson's Leukocytes Identified by RNA Sequencing. PLoS Computational Biology, 2014, 10, e1003517.	3.2	167
35	Simultaneously recorded single units in the frontal cortex go through sequences of discrete and stable states in monkeys performing a delayed localization task. Journal of Neuroscience, 1996, 16, 752-768.	3.6	163
36	Dopamine Replacement Therapy Reverses Abnormal Synchronization of Pallidal Neurons in the 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine Primate Model of Parkinsonism. Journal of Neuroscience, 2002, 22, 7850-7855.	3.6	156

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37	Complex Locking Rather Than Complete Cessation of Neuronal Activity in the Globus Pallidus of a 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine-Treated Primate in Response to Pallidal Microstimulation. Journal of Neuroscience, 2004, 24, 7410-7419.	3.6	143
38	Akineto-rigid vs. tremor syndromes in Parkinsonism. Current Opinion in Neurology, 2009, 22, 387-393.	3.6	131
39	Small RNA sequencing-microarray analyses in Parkinson leukocytes reveal deep brain stimulation-induced splicing changes that classify brain region transcriptomes. Frontiers in Molecular Neuroscience, 2013, 6, 10.	2.9	114
40	Dopamine Replacement Therapy Does Not Restore the Full Spectrum of Normal Pallidal Activity in the 1-Methyl-4-Phenyl-1,2,3,6-Tetra-Hydropyridine Primate Model of Parkinsonism. Journal of Neuroscience, 2006, 26, 8101-8114.	3.6	104
41	Inducing Gamma Oscillations and Precise Spike Synchrony by Operant Conditioning via Brain-Machine Interface. Neuron, 2013, 77, 361-375.	8.1	104
42	Delimiting subterritories of the human subthalamic nucleus by means of microelectrode recordings and a Hidden Markov Model. Movement Disorders, 2009, 24, 1785-1793.	3.9	102
43	Quantifying the isolation quality of extracellularly recorded action potentials. Journal of Neuroscience Methods, 2007, 163, 267-282.	2.5	98
44	Independent Coding of Movement Direction and Reward Prediction by Single Pallidal Neurons. Journal of Neuroscience, 2004, 24, 10047-10056.	3.6	95
45	Subthalamic, not striatal, activity correlates with basal ganglia downstream activity in normal and parkinsonian monkeys. ELife, 2016, 5, .	6.0	91
46	Statistical Properties of Pauses of the High-Frequency Discharge Neurons in the External Segment of the Globus Pallidus. Journal of Neuroscience, 2007, 27, 2525-2538.	3.6	89
47	Failure in identification of overlapping spikes from multiple neuron activity causes artificial correlations. Journal of Neuroscience Methods, 2001, 107, 1-13.	2.5	88
48	Functional Correlations between Neighboring Neurons in the Primate Globus Pallidus Are Weak or Nonexistent. Journal of Neuroscience, 2003, 23, 4012-4016.	3.6	87
49	Realâ€time refinement of subthalamic nucleus targeting using Bayesian decisionâ€making on the root mean square measure. Movement Disorders, 2006, 21, 1425-1431.	3.9	86
50	Striatal cholinergic interneurons and corticoâ€striatal synaptic plasticity in health and disease. Movement Disorders, 2015, 30, 1014-1025.	3.9	84
51	Longer Î² oscillatory episodes reliably identify pathological subthalamic activity in Parkinsonism. Movement Disorders, 2018, 33, 1609-1618.	3.9	83
52	Propofol Decreases Neuronal Population Spiking Activity in the Subthalamic Nucleus of Parkinsonian Patients. Anesthesia and Analgesia, 2010, 111, 1285-1289.	2.2	82
53	Local Shuffling of Spike Trains Boosts the Accuracy of Spike Train Spectral Analysis. Journal of Neurophysiology, 2006, 95, 3245-3256.	1.8	76
54	Low-Pass Filter Properties of Basal Ganglia Cortical Muscle Loops in the Normal and MPTP Primate Model of Parkinsonism. Journal of Neuroscience, 2008, 28, 633-649.	3.6	76

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55	Temporal Convergence of Dynamic Cell Assemblies in the Striato-Pallidal Network. Journal of Neuroscience, 2012, 32, 2473-2484.	3.6	76
56	The dynamics of dopamine in control of motor behavior. Current Opinion in Neurobiology, 2009, 19, 615-620.	4.2	75
57	Synchronization of Midbrain Dopaminergic Neurons Is Enhanced by Rewarding Events. Neuron, 2009, 62, 695-704.	8.1	75
58	<scp>S</scp>top! border ahead: <scp>A</scp>utomatic detection of subthalamic exit during deep brain stimulation surgery. Movement Disorders, 2017, 32, 70-79.	3.9	70
59	Singing-Related Neural Activity Distinguishes Two Putative Pallidal Cell Types in the Songbird Basal Ganglia: Comparison to the Primate Internal and External Pallidal Segments. Journal of Neuroscience, 2010, 30, 7088-7098.	3.6	65
60	Synchrony of rest tremor in multiple limbs in Parkinson's disease: evidence for multiple oscillators. Journal of Neural Transmission, 2001, 108, 287-296.	2.8	64
61	Local vs. volume conductance activity of field potentials in the human subthalamic nucleus. Journal of Neurophysiology, 2017, 117, 2140-2151.	1.8	63
62	Identifying subtle interrelated changes in functional gene categories using continuous measures of gene expression. Bioinformatics, 2005, 21, 1129-1137.	4.1	61
63	Encoding of Probabilistic Rewarding and Aversive Events by Pallidal and Nigral Neurons. Journal of Neurophysiology, 2009, 101, 758-772.	1.8	60
64	Reinforcement-Driven Dimensionality Reduction - A Model for Information Processing in the Basal Ganglia. Journal of Basic and Clinical Physiology and Pharmacology, 2000, 11, 305-320.	1.3	59
65	Asymmetric right/left encoding of emotions in the human subthalamic nucleus. Frontiers in Systems Neuroscience, 2013, 7, 69.	2.5	59
66	Subthalamic theta activity: a novel human subcortical biomarker for obsessive compulsive disorder. Translational Psychiatry, 2018, 8, 118.	4.8	59
67	Firing patterns of single units in the prefrontal cortex and neural network models. Network: Computation in Neural Systems, 1990, 1, 13-25.	3.6	57
68	Firing patterns of single units in the prefrontal cortex and neural network models. Network: Computation in Neural Systems, 1990, 1, 13-25.	3.6	56
69	Emerging Patterns of Neuronal Responses in Supplementary and Primary Motor Areas during Sensorimotor Adaptation. Journal of Neuroscience, 2005, 25, 10941-10951.	3.6	53
70	Bilateral overactivation of the sensorimotor cortex in the unilateral rodent model of Parkinson's disease - a functional magnetic resonance imaging study. European Journal of Neuroscience, 2002, 15, 389-394.	2.6	52
71	Manganeseâ€enhanced MRI in a rat model of Parkinson's disease. Journal of Magnetic Resonance Imaging, 2007, 26, 863-870.	3.4	52
72	A prospective international multi-center study on safety and efficacy of deep brain stimulation for resistant obsessive-compulsive disorder. Molecular Psychiatry, 2021, 26, 1234-1247.	7.9	51

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73	Advanced microarray analysis highlights modified neuro-immune signaling in nucleated blood cells from Parkinson's disease patients. Journal of Neuroimmunology, 2008, 201-202, 227-236.	2.3	49
74	Redundant dopaminergic activity may enable compensatory axonal sprouting in Parkinson disease. Neurology, 2014, 82, 1093-1098.	1.1	49
75	Basal ganglia, movement disorders and deep brain stimulation: advances made through non-human primate research. Journal of Neural Transmission, 2018, 125, 419-430.	2.8	49
76	The neuronal refractory period causes a short-term peak in the autocorrelation function. Journal of Neuroscience Methods, 2001, 104, 155-163.	2.5	46
77	Targeting of the Subthalamic Nucleus for Deep Brain Stimulation: A Survey Among Parkinson Disease Specialists. World Neurosurgery, 2017, 99, 41-46.	1.3	45
78	Pathophysiology of the basal ganglia and movement disorders: From animal models to human clinical applications. Neuroscience and Biobehavioral Reviews, 2008, 32, 367-377.	6.1	44
79	Parkinsonism-related Î² oscillations in the primate basal ganglia networks â€“ Recent advances and clinical implications. Parkinsonism and Related Disorders, 2019, 59, 2-8.	2.2	44
80	Frontal Cognitive Impairments and Saccadic Deficits in Low-Dose MPTP-Treated Monkeys. Journal of Neurophysiology, 1999, 81, 858-874.	1.8	43
81	Computational physiology of the neural networks of the primate globus pallidus: function and dysfunction. Neuroscience, 2011, 198, 171-192.	2.3	42
82	Encoding by Synchronization in the Primate Striatum. Journal of Neuroscience, 2013, 33, 4854-4866.	3.6	41
83	Emergence of Novel Representations in Primary Motor Cortex and Premotor Neurons during Associative Learning. Journal of Neuroscience, 2008, 28, 9545-9556.	3.6	40
84	Constant Current versus Constant Voltage Subthalamic Nucleus Deep Brain Stimulation in Parkinson's Disease. Stereotactic and Functional Neurosurgery, 2015, 93, 114-121.	1.5	39
85	One year double blind study of high vs low frequency subcallosal cingulate stimulation for depression. Journal of Psychiatric Research, 2018, 96, 124-134.	3.1	39
86	Desynchronization of slow oscillations in the basal ganglia during natural sleep. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4274-E4283.	7.1	38
87	Different correlation patterns of cholinergic and GABAergic interneurons with striatal projection neurons. Frontiers in Systems Neuroscience, 2013, 7, 47.	2.5	36
88	Subthalamic nucleus long-range synchronizationâ€"an independent hallmark of human Parkinson's disease. Frontiers in Systems Neuroscience, 2013, 7, 79.	2.5	36
89	Phase-Specific Microstimulation Differentially Modulates Beta Oscillations and Affects Behavior. Cell Reports, 2020, 30, 2555-2566.e3.	6.4	36
90	Modulation of dopamine tone induces frequency shifts in cortico-basal ganglia beta oscillations. Nature Communications, 2021, 12, 7026.	12.8	36

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91	Levodopa and subthalamic deep brain stimulation responses are not congruent. Movement Disorders, 2010, 25, 2379-2386.	3.9	35
92	Whole transcriptome RNA sequencing data from blood leukocytes derived from Parkinson's disease patients prior to and following deep brain stimulation treatment. Genomics Data, 2015, 3, 57-60.	1.3	35
93	Meta-analysis of genetic and environmental Parkinson's disease models reveals a common role of mitochondrial protection pathways. Neurobiology of Disease, 2012, 45, 1018-1030.	4.4	34
94	A personal computer-based spike detector and sorter: implementation and evaluation. Journal of Neuroscience Methods, 1992, 41, 187-197.	2.5	33
95	Microelectrode Recordings Validate the Clinical Visualization of Subthalamic-Nucleus Based on 7T Magnetic Resonance Imaging and Machine Learning for Deep Brain Stimulation Surgery. Neurosurgery, 2019, 84, 749-757.	1.1	33
96	Discharge Rate of Substantia Nigra Pars Reticulata Neurons Is Reduced In Non-Parkinsonian Monkeys With Apomorphine-Induced Orofacial Dyskinesia. Journal of Neurophysiology, 2004, 92, 1973-1981.	1.8	32
97	Dynamic and spatial features of the inhibitory pallidal GABAergic synapses. Neuroscience, 2005, 135, 791-802.	2.3	31
98	Striatal action-learning based on dopamine concentration. Experimental Brain Research, 2010, 200, 307-317.	1.5	31
99	Basal ganglia beta oscillations during sleep underlie Parkinsonian insomnia. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17359-17368.	7.1	31
100	Physiology and pathophysiology of the basal gangliaâ€"thalamoâ€"cortical networks. Parkinsonism and Related Disorders, 2007, 13, S437-S439.	2.2	30
101	Trial to trial variability in either stimulus or action causes apparent correlation and synchrony in neuronal activity. Journal of Neuroscience Methods, 2001, 111, 99-110.	2.5	29
102	The Basal Ganglia. , 2012, , 678-738.		29
103	Exon Arrays Reveal Alternative Splicing Aberrations in Parkinsonâ€™s Disease Leukocytes. Neurodegenerative Diseases, 2012, 10, 203-206.	1.4	29
104	Dissociable roles of ventral pallidum neurons in the basal ganglia reinforcement learning network. Nature Neuroscience, 2020, 23, 556-564.	14.8	29
105	Lack of Spike-Count and Spike-Time Correlations in the Substantia Nigra Reticulata Despite Overlap of Neural Responses. Journal of Neurophysiology, 2007, 98, 2232-2243.	1.8	28
106	Thetaâ€alpha Oscillations Characterize Emotional Subregion in the Human Ventral Subthalamic Nucleus. Movement Disorders, 2020, 35, 337-343.	3.9	28
107	A noninvasive, fast and inexpensive tool for the detection of eye open/closed state in primates. Journal of Neuroscience Methods, 2009, 178, 350-356.	2.5	27
108	Dopaminergic Balance between Reward Maximization and Policy Complexity. Frontiers in Systems Neuroscience, 2011, 5, 22.	2.5	27

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109	Semi-automated application for estimating subthalamic nucleus boundaries and optimal target selection for deep brain stimulation implantation surgery. Journal of Neurosurgery, 2019, 130, 1224-1233.	1.6	27
110	Deep Brain Stimulation Initiative: Toward Innovative Technology, New Disease Indications, and Approaches to Current and Future Clinical Challenges in Neuromodulation Therapy. Frontiers in Neurology, 2020, 11, 597451.	2.4	27
111	Computational physiology of the basal ganglia in Parkinsonâ€™s disease. Progress in Brain Research, 2010, 183, 259-273.	1.4	26
112	The use of macroelectrodes in recording cellular spiking activity. Journal of Neuroscience Methods, 2012, 206, 34-39.	2.5	26
113	Independently together: subthalamic theta and beta opposite roles in predicting Parkinsonâ€™s tremor. Brain Communications, 2020, 2, fcaa074.	3.3	26
114	Synchronizing activity of basal ganglia and pathophysiology of Parkinsonâ€™s disease. , 2006, , 17-20.		25
115	Higher neuronal discharge rate in the motor area of the subthalamic nucleus of Parkinsonian patients. Journal of Neurophysiology, 2014, 112, 1409-1420.	1.8	24
116	Ketamine induced converged synchronous gamma oscillations in the cortico-basal ganglia network of nonhuman primates. Journal of Neurophysiology, 2017, 118, 917-931.	1.8	24
117	Real-time machine learning classification of pallidal borders during deep brain stimulation surgery. Journal of Neural Engineering, 2020, 17, 016021.	3.5	24
118	Microelectrode Recording Duration and Spatial Density Constraints for Automatic Targeting of the Subthalamic Nucleus. Stereotactic and Functional Neurosurgery, 2012, 90, 325-334.	1.5	22
119	Pallidal spiking activity reflects learning dynamics and predicts performance. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6281-E6289.	7.1	21
120	Reduced basal activity and increased functional homogeneity in sensorimotor and striatum of a Parkinson's disease rat model: a functional MRI study. European Journal of Neuroscience, 2005, 21, 2227-2232.	2.6	20
121	Pre- and Postsynaptic Serotoninergic Excitation of Globus Pallidus Neurons. Journal of Neurophysiology, 2008, 100, 1053-1066.	1.8	20
122	Adaptive acetylcholinesterase splicing patterns attenuate 1â€methylâ€4â€phenylâ€1,2,3,6â€tetrahydropyridineâ€induced Parkinsonism in mice. European Journal of Neuroscience, 2006, 23, 2915-2922.	2.6	19
123	Identifying Alternative Hyper-Splicing Signatures in MG-Thymoma by Exon Arrays. PLoS ONE, 2008, 3, e2392.	2.5	18
124	What is the true discharge rate and pattern of the striatal projection neurons in Parkinsonâ€™s disease and Dystonia?. ELife, 2020, 9, .	6.0	18
125	Detection of onset of neuronal activity by allowing for heterogeneity in the change points. Journal of Neuroscience Methods, 2002, 122, 25-42.	2.5	17
126	Prior pallidotomy reduces and modifies neuronal activity in the subthalamic nucleus of Parkinson's disease patients. European Journal of Neuroscience, 2008, 27, 483-491.	2.6	16

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127	Balance of Increases and Decreases in Firing Rate of the Spontaneous Activity of Basal Ganglia High-Frequency Discharge Neurons. Journal of Neurophysiology, 2008, 100, 3086-3104.	1.8	16
128	Neurons in Both Pallidal Segments Change Their Firing Properties Similarly Prior to Closure of the Eyes. Journal of Neurophysiology, 2010, 103, 346-359.	1.8	16
129	Quantifying Hypomimia in Parkinson Patients Using a Depth Camera. Communications in Computer and Information Science, 2016, , 63-71.	0.5	16
130	Etiologies of insomnia in Parkinson's disease â€" Lessons from human studies and animal models. Experimental Neurology, 2022, 350, 113976.	4.1	16
131	Deep brain stimulation induces rapidly reversible transcript changes in Parkinson's leucocytes. Journal of Cellular and Molecular Medicine, 2012, 16, 1496-1507.	3.6	15
132	Deep brain stimulation modulates nonsense-mediated RNA decay in Parkinsonâ€™s patients leukocytes. BMC Genomics, 2013, 14, 478.	2.8	14
133	Sedative drugs modulate the neuronal activity in the subthalamic nucleus of parkinsonian patients. Scientific Reports, 2020, 10, 14536.	3.3	14
134	Stop and Think about Basal Ganglia Functional Organization: The Pallido-Striatal â€œStopâ€•Route. Neuron, 2016, 89, 237-239.	8.1	12
135	Parkinsonian Tremor is Associated with Low Frequency Neuronal Oscillations in Selective Loops of the Basal Ganglia. Advances in Behavioral Biology, 1994, , 317-325.	0.2	12
136	Toward asleep DBS: cortico-basal ganglia spectral and coherence activity during interleaved propofol/ketamine sedation mimics NREM/REM sleep activity. Npj Parkinson's Disease, 2021, 7, 67.	5.3	11
137	Anesthesia reduces discharge rates in the human pallidum without changing the discharge rate ratio between pallidal segments. European Journal of Neuroscience, 2016, 44, 2909-2913.	2.6	10
138	Loss of frequencies in autocorrelations and a procedure to recover them. Journal of Neuroscience Methods, 1995, 62, 65-71.	2.5	9
139	Physiology of Parkinson's Disease. , 2008, , 25-36.		9
140	Basal ganglia: physiological, behavioral, and computational studies. Frontiers in Systems Neuroscience, 2014, 8, 150.	2.5	9
141	Analyzing alternative splicing data of splice junction arrays from Parkinson patients' leukocytes before and after deep brain stimulation as compared with control donors. Genomics Data, 2015, 5, 340-343.	1.3	9
142	Physiological studies of information processing in the normal and Parkinsonian basal ganglia: pallidal activity in Go/No-Go task and following MPTP treatment. Progress in Brain Research, 2005, 147, 283-293.	1.4	8
143	Quantifying Levodopa-Induced Dyskinesia Using Depth Camera. , 2015, , .		8
144	Coinciding Decreases in Discharge Rate Suggest That Spontaneous Pauses in Firing of External Pallidum Neurons Are Network Driven. Journal of Neuroscience, 2015, 35, 6744-6751.	3.6	8

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145	Posterolateral Trajectories Favor a Longer Motor Domain in Subthalamic Nucleus Deep Brain Stimulation for Parkinson Disease. World Neurosurgery, 2017, 106, 450-461.	1.3	8
146	Encoding by Response Duration in the Basal Ganglia. Journal of Neurophysiology, 2008, 100, 3244-3252.	1.8	7
147	Adaptive Alternative Splicing Correlates with Less Environmental Risk of Parkinsonism. Neurodegenerative Diseases, 2012, 9, 87-98.	1.4	7
148	OVERLAPPING MOLECULAR SIGNATURES IN PARKINSON'S PATIENT LEUKOCYTES BEFORE AND AFTER TREATMENT AND IN MOUSE MODEL BRAIN REGIONS. CNS and Neurological Disorders - Drug Targets, 2013, 999, 7-8.	1.4	7
149	Hold your pauses: external globus pallidus neurons respond to behavioural events by decreasing pause activity. European Journal of Neuroscience, 2015, 42, 2415-2425.	2.6	6
150	Machine learning-based personalized subthalamic biomarkers predict ON-OFF levodopa states in Parkinson patients. Journal of Neural Engineering, 2021, 18, 046058.	3.5	6
151	Asleep DBS under ketamine sedation: Proof of concept. Neurobiology of Disease, 2022, 170, 105747.	4.4	6
152	Neighboring Pallidal Neurons Do Not Exhibit more Synchronous Oscillations than Remote Ones in the MPTP Primate Model of Parkinson's Disease. Frontiers in Systems Neuroscience, 2011, 5, 54.	2.5	5
153	Novelty encoding by the output neurons of the basal ganglia. Frontiers in Systems Neuroscience, 2009, 3, 20.	2.5	4
154	Location, location, location: Validating the position of deep brain stimulation electrodes. Movement Disorders, 2016, 31, 259-259.	3.9	4
155	Increased energy expenditure during posture maintenance and exercise in early Parkinson disease. Health Science Reports, 2018, 1, e14.	1.5	4
156	Movement context modulates neuronal activity in motor and limbic-associative domains of the human parkinsonian subthalamic nucleus. Neurobiology of Disease, 2020, 136, 104716.	4.4	4
157	Deep Brain Stimulation Can Differentiate Subregions of the Human Subthalamic Nucleus Area by EEG Biomarkers. Frontiers in Systems Neuroscience, 2021, 15, 747681.	2.5	4
158	A Real-Life Search for the Optimal Set of Conversion Factors to Levodopa-Equivalent-Dose in Parkinsonâ€™s Disease Patients on Polytherapy. Journal of Parkinson's Disease, 2020, 10, 173-178.	2.8	3
159	Prior pallidotomy reduces and modifies neuronal activity in the subthalamic nucleus of Parkinson's disease patients. European Journal of Neuroscience, 2008, 27, 1308-1310.	2.6	2
160	Pathological Synchrony of Basal Ganglia-Cortical Networks in the Systemic MPTP Primate Model of Parkinson's Disease. Handbook of Behavioral Neuroscience, 2010, , 653-658.	0.7	2
161	Next generation programming. Movement Disorders, 2018, 33, 186-186.	3.9	2
162	Asymmetric Encoding of Positive and Negative Expectations by Low-Frequency Discharge Basal Ganglia Neurons. Advances in Behavioral Biology, 2009, , 63-72.	0.2	2

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163	Intra-operative Identification of the Subthalamic Nucleus Motor Zone Using Goniometers. Lecture Notes in Computer Science, 2013, , 21-29.	1.3	2
164	Non-uniform distribution of dendritic nonlinearities differentially engages thalamostriatal and corticostriatal inputs onto cholinergic interneurons. ELife, 0, 11, .	6.0	2
165	In quest of the oscillator(s) in tremor: are we getting closer?. Brain, 2014, 137, 3102-3103.	7.6	1
166	Closed-Loop Deep Brain Stimulation for Parkinsonâ€™s Disease. , 2019, , 131-149.		1
167	Spontaneous pauses in firing of external pallidum neurons are associated with exploratory behavior. Communications Biology, 2022, 5, .	4.4	1
168	Reply to â€˜Cortex, spikes and wavesâ€™ by H Stowell. Network: Computation in Neural Systems, 1990, 1, 235-235.	3.6	0
169	DYNAMICS OF COHERENCE IN CORTICAL NEURAL ACTIVITY: EXPERIMENTAL OBSERVATIONS AND FUNCTIONAL INTERPRETATIONS. International Journal of Neural Systems, 1992, 03, 105-114.	5.2	0
170	Motor systems. Current Opinion in Neurobiology, 2010, 20, 687-688.	4.2	0
171	Basal Ganglia: Acetylcholine Interactions and Behaviorâ˜†. , 2017, , .		0
172	High-Frequency Stimulation of the Globus Pallidus External Segment Biases Behavior Toward Reward. Advances in Behavioral Biology, 2009, , 85-96.	0.2	0
173	Learning with an Asymmetric Teacher: Asymmetric Dopamine-Like Response Can Be Used as an Error Signal for Reinforcement Learning. Advances in Behavioral Biology, 2009, , 201-210.	0.2	0
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