Hagai Bergman

List of Publications by Year
in descending order

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

20817

10158

#	Article	IF	Citations
1	Etiologies of insomnia in Parkinson's disease â€“ Lessons from human studies and animal models. Experimental Neurology, 2022, 350, 113976.	4.1	16
2	Asleep DBS under ketamine sedation: Proof of concept. Neurobiology of Disease, 2022, 170, 105747.	4.4	6
3	Spontaneous pauses in firing of external pallidum neurons are associated with exploratory behavior. Communications Biology, 2022, 5, .	4.4	1
4	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
5	Machine learning-based personalized subthalamic biomarkers predict ON-OFF levodopa states in Parkinson patients. Journal of Neural Engineering, 2021, 18, 046058.	3.5	6
6	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
7	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
8	Modulation of dopamine tone induces frequency shifts in cortico-basal ganglia beta oscillations. Nature Communications, 2021, 12, 7026.	12.8	36
9	Real-time machine learning classification of pallidal borders during deep brain stimulation surgery. Journal of Neural Engineering, 2020, 17, 016021.	3.5	24
10	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
11	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
12	Thetaâ€alpha Oscillations Characterize Emotional Subregion in the Human Ventral Subthalamic Nucleus. Movement Disorders, 2020, 35, 337-343.	3.9	28
13	Independently together: subthalamic theta and beta opposite roles in predicting Parkinsonâ€™s tremor. Brain Communications, 2020, 2, fcaa074.	3.3	26
14	Sedative drugs modulate the neuronal activity in the subthalamic nucleus of parkinsonian patients. Scientific Reports, 2020, 10, 14536.	3.3	14
15	Dissociable roles of ventral pallidum neurons in the basal ganglia reinforcement learning network. Nature Neuroscience, 2020, 23, 556-564.	14.8	29
16	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
17	Phase-Specific Microstimulation Differentially Modulates Beta Oscillations and Affects Behavior. Cell Reports, 2020, 30, 2555-2566.e3.	6.4	36
18	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

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19	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
20	Neurophysiology of the Basal Ganglia and Deep Brain Stimulation. , 2020, , 67-75.		0
21	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
22	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
23	Deep brain stimulation: current challenges and future directions. Nature Reviews Neurology, 2019, 15, 148-160.	10.1	721
24	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
25	Closed-Loop Deep Brain Stimulation for Parkinsonâ€™s Disease. , 2019, , 131-149.		1
26	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
27	Next generation programming. Movement Disorders, 2018, 33, 186-186.	3.9	2
28	Increased energy expenditure during posture maintenance and exercise in early Parkinson disease. Health Science Reports, 2018, 1, e14.	1.5	4
29	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
30	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
31	Longer Î² oscillatory episodes reliably identify pathological subthalamic activity in Parkinsonism. Movement Disorders, 2018, 33, 1609-1618.	3.9	83
32	Subthalamic theta activity: a novel human subcortical biomarker for obsessive compulsive disorder. Translational Psychiatry, 2018, 8, 118.	4.8	59
33	Local vs. volume conductance activity of field potentials in the human subthalamic nucleus. Journal of Neurophysiology, 2017, 117, 2140-2151.	1.8	63
34	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
35	Mutations in the histone methyltransferase gene KMT2B cause complex early-onset dystonia. Nature Genetics, 2017, 49, 223-237.	21.4	186
36	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

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37	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
38	Insights into the mechanisms of deep brain stimulation. Nature Reviews Neurology, 2017, 13, 548-554.	10.1	240
39	Targeting of the Subthalamic Nucleus for Deep Brain Stimulation: A Survey Among Parkinson Disease Specialists. World Neurosurgery, 2017, 99, 41-46.	1.3	45
40	<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
41	Basal Ganglia: Acetylcholine Interactions and Behaviorâ˜†. , 2017, , .		0
42	Location, location, location: Validating the position of deep brain stimulation electrodes. Movement Disorders, 2016, 31, 259-259.	3.9	4
43	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
44	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
45	Stop and Think about Basal Ganglia Functional Organization: The Pallido-Striatal â€œStopâ€•Route. Neuron, 2016, 89, 237-239.	8.1	12
46	Quantifying Hypomimia in Parkinson Patients Using a Depth Camera. Communications in Computer and Information Science, 2016, , 63-71.	0.5	16
47	Subthalamic, not striatal, activity correlates with basal ganglia downstream activity in normal and parkinsonian monkeys. ELife, 2016, 5, .	6.0	91
48	Deep Brain Stimulation in Parkinson's Disease and Essential Tremor: In Search of Lost Time. Israel Medical Association Journal, 2016, 18, 424-425.	0.1	0
49	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
50	Striatal cholinergic interneurons and corticoâ€striatal synaptic plasticity in health and disease. Movement Disorders, 2015, 30, 1014-1025.	3.9	84
51	Quantifying Levodopa-Induced Dyskinesia Using Depth Camera. , 2015, , .		8
52	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
53	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
54	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

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55	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
56	Basal ganglia: physiological, behavioral, and computational studies. Frontiers in Systems Neuroscience, 2014, 8, 150.	2.5	9
57	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
58	In quest of the oscillator(s) in tremor: are we getting closer?. Brain, 2014, 137, 3102-3103.	7.6	1
59	Redundant dopaminergic activity may enable compensatory axonal sprouting in Parkinson disease. Neurology, 2014, 82, 1093-1098.	1.1	49
60	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
61	Deep brain stimulation modulates nonsense-mediated RNA decay in Parkinsonâ€™s patients leukocytes. BMC Genomics, 2013, 14, 478.	2.8	14
62	Inducing Gamma Oscillations and Precise Spike Synchrony by Operant Conditioning via Brain-Machine Interface. Neuron, 2013, 77, 361-375.	8.1	104
63	Encoding by Synchronization in the Primate Striatum. Journal of Neuroscience, 2013, 33, 4854-4866.	3.6	41
64	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
65	Different correlation patterns of cholinergic and GABAergic interneurons with striatal projection neurons. Frontiers in Systems Neuroscience, 2013, 7, 47.	2.5	36
66	Asymmetric right/left encoding of emotions in the human subthalamic nucleus. Frontiers in Systems Neuroscience, 2013, 7, 69.	2.5	59
67	Subthalamic nucleus long-range synchronizationâ€"an independent hallmark of human Parkinson's disease. Frontiers in Systems Neuroscience, 2013, 7, 79.	2.5	36
68	Intra-operative Identification of the Subthalamic Nucleus Motor Zone Using Goniometers. Lecture Notes in Computer Science, 2013, , 21-29.	1.3	2
69	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
70	The Basal Ganglia. , 2012, , 678-738.		29
71	Temporal Convergence of Dynamic Cell Assemblies in the Striato-Pallidal Network. Journal of Neuroscience, 2012, 32, 2473-2484.	3.6	76
72	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

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73	Exon Arrays Reveal Alternative Splicing Aberrations in Parkinsonâ€™s Disease Leukocytes. Neurodegenerative Diseases, 2012, 10, 203-206.	1.4	29
74	Adaptive Alternative Splicing Correlates with Less Environmental Risk of Parkinsonism. Neurodegenerative Diseases, 2012, 9, 87-98.	1.4	7
75	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
76	The use of macroelectrodes in recording cellular spiking activity. Journal of Neuroscience Methods, 2012, 206, 34-39.	2.5	26
77	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
78	Closed-Loop Deep Brain Stimulation Is Superior in Ameliorating Parkinsonism. Neuron, 2011, 72, 370-384.	8.1	705
79	Computational physiology of the neural networks of the primate globus pallidus: function and dysfunction. Neuroscience, 2011, 198, 171-192.	2.3	42
80	Dopaminergic Balance between Reward Maximization and Policy Complexity. Frontiers in Systems Neuroscience, 2011, 5, 22.	2.5	27
81	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
82	Striatal action-learning based on dopamine concentration. Experimental Brain Research, 2010, 200, 307-317.	1.5	31
83	Motor systems. Current Opinion in Neurobiology, 2010, 20, 687-688.	4.2	0
84	Levodopa and subthalamic deep brain stimulation responses are not congruent. Movement Disorders, 2010, 25, 2379-2386.	3.9	35
85	Goal-directed and habitual control in the basal ganglia: implications for Parkinson's disease. Nature Reviews Neuroscience, 2010, 11, 760-772.	10.2	869
86	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
87	Subthalamic span of Â oscillations predicts deep brain stimulation efficacy for patients with Parkinson's disease. Brain, 2010, 133, 2007-2021.	7.6	262
88	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
89	Propofol Decreases Neuronal Population Spiking Activity in the Subthalamic Nucleus of Parkinsonian Patients. Anesthesia and Analgesia, 2010, 111, 1285-1289.	2.2	82
90	Computational physiology of the basal ganglia in Parkinsonâ€™s disease. Progress in Brain Research, 2010, 183, 259-273.	1.4	26

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91	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
92	Novelty encoding by the output neurons of the basal ganglia. Frontiers in Systems Neuroscience, 2009, 3, 20.	2.5	4
93	The dynamics of dopamine in control of motor behavior. Current Opinion in Neurobiology, 2009, 19, 615-620.	4.2	75
94	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
95	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
96	Synchronization of Midbrain Dopaminergic Neurons Is Enhanced by Rewarding Events. Neuron, 2009, 62, 695-704.	8.1	75
97	Akineto-rigid vs. tremor syndromes in Parkinsonism. Current Opinion in Neurology, 2009, 22, 387-393.	3.6	131
98	Encoding of Probabilistic Rewarding and Aversive Events by Pallidal and Nigral Neurons. Journal of Neurophysiology, 2009, 101, 758-772.	1.8	60
99	Asymmetric Encoding of Positive and Negative Expectations by Low-Frequency Discharge Basal Ganglia Neurons. Advances in Behavioral Biology, 2009, , 63-72.	0.2	2
100	High-Frequency Stimulation of the Globus Pallidus External Segment Biases Behavior Toward Reward. Advances in Behavioral Biology, 2009, , 85-96.	0.2	0
101	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
102	Reduced and Modified Neuronal Activity in the Subthalamic Nucleus of Parkinsonâ€™s Disease Patients with Prior Pallidotomy. Advances in Behavioral Biology, 2009, , 535-549.	0.2	0
103	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
104	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
105	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
106	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
107	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
108	Subthalamic nucleus functional organization revealed by parkinsonian neuronal oscillations and synchrony. Brain, 2008, 131, 3395-3409.	7.6	182

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109	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
110	Emergence of Novel Representations in Primary Motor Cortex and Premotor Neurons during Associative Learning. Journal of Neuroscience, 2008, 28, 9545-9556.	3.6	40
111	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
112	Physiology of Parkinson's Disease. , 2008, , 25-36.		9
113	Encoding by Response Duration in the Basal Ganglia. Journal of Neurophysiology, 2008, 100, 3244-3252.	1.8	7
114	Identifying Alternative Hyper-Splicing Signatures in MG-Thymoma by Exon Arrays. PLoS ONE, 2008, 3, e2392.	2.5	18
115	Pre- and Postsynaptic Serotoninergic Excitation of Globus Pallidus Neurons. Journal of Neurophysiology, 2008, 100, 1053-1066.	1.8	20
116	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
117	Pathological synchronization in Parkinson's disease: networks, models and treatments. Trends in Neurosciences, 2007, 30, 357-364.	8.6	1,399
118	Physiology and pathophysiology of the basal gangliaâ€"thalamoâ€"cortical networks. Parkinsonism and Related Disorders, 2007, 13, S437-S439.	2.2	30
119	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
120	Manganeseâ€enhanced MRI in a rat model of Parkinson's disease. Journal of Magnetic Resonance Imaging, 2007, 26, 863-870.	3.4	52
121	Quantifying the isolation quality of extracellularly recorded action potentials. Journal of Neuroscience Methods, 2007, 163, 267-282.	2.5	98
122	Basal ganglia oscillations and pathophysiology of movement disorders. Current Opinion in Neurobiology, 2006, 16, 629-637.	4.2	196
123	Local Shuffling of Spike Trains Boosts the Accuracy of Spike Train Spectral Analysis. Journal of Neurophysiology, 2006, 95, 3245-3256.	1.8	76
124	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
125	Midbrain dopamine neurons encode decisions for future action. Nature Neuroscience, 2006, 9, 1057-1063.	14.8	403
126	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

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127	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
128	Competition between Feedback Loops Underlies Normal and Pathological Dynamics in the Basal Ganglia. Journal of Neuroscience, 2006, 26, 3567-3583.	3.6	289
129	Synchronizing activity of basal ganglia and pathophysiology of Parkinsonâ€™s disease. , 2006, , 17-20.		25
130	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
131	Emerging Patterns of Neuronal Responses in Supplementary and Primary Motor Areas during Sensorimotor Adaptation. Journal of Neuroscience, 2005, 25, 10941-10951.	3.6	53
132	Identifying subtle interrelated changes in functional gene categories using continuous measures of gene expression. Bioinformatics, 2005, 21, 1129-1137.	4.1	61
133	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
134	Dynamic and spatial features of the inhibitory pallidal GABAergic synapses. Neuroscience, 2005, 135, 791-802.	2.3	31
135	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
136	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
137	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
138	Independent Coding of Movement Direction and Reward Prediction by Single Pallidal Neurons. Journal of Neuroscience, 2004, 24, 10047-10056.	3.6	95
139	Coincident but Distinct Messages of Midbrain Dopamine and Striatal Tonically Active Neurons. Neuron, 2004, 43, 133-143.	8.1	481
140	Preparatory activity in motor cortex reflects learning of local visuomotor skills. Nature Neuroscience, 2003, 6, 882-890.	14.8	174
141	Information processing, dimensionality reduction and reinforcement learning in the basal ganglia. Progress in Neurobiology, 2003, 71, 439-473.	5.7	347
142	Functional Correlations between Neighboring Neurons in the Primate Globus Pallidus Are Weak or Nonexistent. Journal of Neuroscience, 2003, 23, 4012-4016.	3.6	87
143	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
144	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

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145	Pathophysiology of Parkinson's disease: From clinical neurology to basic neuroscience and back. Movement Disorders, 2002, 17, S28-S40.	3.9	256
146	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
147	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
148	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
149	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
150	The neuronal refractory period causes a short-term peak in the autocorrelation function. Journal of Neuroscience Methods, 2001, 104, 155-163.	2.5	46
151	Failure in identification of overlapping spikes from multiple neuron activity causes artificial correlations. Journal of Neuroscience Methods, 2001, 107, 1-13.	2.5	88
152	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
153	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
154	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
155	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
156	Frontal Cognitive Impairments and Saccadic Deficits in Low-Dose MPTP-Treated Monkeys. Journal of Neurophysiology, 1999, 81, 858-874.	1.8	43
157	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
158	Physiological aspects of information processing in the basal ganglia of normal and parkinsonian primates. Trends in Neurosciences, 1998, 21, 32-38.	8.6	562
159	Spatiotemporal Structure of Cortical Activity: Properties and Behavioral Relevance. Journal of Neurophysiology, 1998, 79, 2857-2874.	1.8	274
160	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
161	Neuronal synchronization of tonically active neurons in the striatum of normal and parkinsonian primates. Journal of Neurophysiology, 1996, 76, 2083-2088.	1.8	240
162	Loss of frequencies in autocorrelations and a procedure to recover them. Journal of Neuroscience Methods, 1995, 62, 65-71.	2.5	9

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163	Dynamics of neuronal interactions in monkey cortex in relation to behavioural events. Nature, 1995, 373, 515-518.	27.8	821
164	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
165	The primate subthalamic nucleus. I. Functional properties in intact animals. Journal of Neurophysiology, 1994, 72, 494-506.	1.8	346
166	The primate subthalamic nucleus. II. Neuronal activity in the MPTP model of parkinsonism. Journal of Neurophysiology, 1994, 72, 507-520.	1.8	1,260
167	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
168	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
169	Dependence of cortical plasticity on correlated activity of single neurons and on behavioral context. Science, 1992, 257, 1412-1415.	12.6	389
170	DYNAMICS OF COHERENCE IN CORTICAL NEURAL ACTIVITY: EXPERIMENTAL OBSERVATIONS AND FUNCTIONAL INTERPRETATIONS. International Journal of Neural Systems, 1992, 03, 105-114.	5.2	0
171	A personal computer-based spike detector and sorter: implementation and evaluation. Journal of Neuroscience Methods, 1992, 41, 187-197.	2.5	33
172	Reply to â€˜Cortex, spikes and wavesâ€™ by H Stowell. Network: Computation in Neural Systems, 1990, 1, 235-235.	3.6	0
173	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
174	Reversal of Experimental Parkinsonism by Lesions of the Subthalamic Nucleus. Science, 1990, 249, 1436-1438.	12.6	1,845
175	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
176	Reply to 'Cortex, spikes and waves' by H Stowell. Network: Computation in Neural Systems, 1990, 1, 235-235.	3.6	0
177	Decorrelation is Augmented Along the Cortical-Basal Ganglia Main Axis. SSRN Electronic Journal, 0, , .	0.4	0
178	Non-uniform distribution of dendritic nonlinearities differentially engages thalamostriatal and corticostriatal inputs onto cholinergic interneurons. ELife, 0, 11, .	6.0	2