

Michael Frank

List of Publications by Year in descending order

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Version: 2024-02-01

204
papers

29,103
citations

7096

78
h-index

6131

159
g-index

272
all docs

272
docs citations

272
times ranked

17502
citing authors

#	ARTICLE	IF	CITATIONS
1	By Carrot or by Stick: Cognitive Reinforcement Learning in Parkinsonism. <i>Science</i> , 2004, 306, 1940-1943.	12.6	1,734
2	Frontal theta as a mechanism for cognitive control. <i>Trends in Cognitive Sciences</i> , 2014, 18, 414-421.	7.8	1,661
3	Hold Your Horses: Impulsivity, Deep Brain Stimulation, and Medication in Parkinsonism. <i>Science</i> , 2007, 318, 1309-1312.	12.6	928
4	Triangulating a Cognitive Control Network Using Diffusion-Weighted Magnetic Resonance Imaging (MRI) and Functional MRI. <i>Journal of Neuroscience</i> , 2007, 27, 3743-3752.	3.6	869
5	Making Working Memory Work: A Computational Model of Learning in the Prefrontal Cortex and Basal Ganglia. <i>Neural Computation</i> , 2006, 18, 283-328.	2.2	839
6	Dynamic Dopamine Modulation in the Basal Ganglia: A Neurocomputational Account of Cognitive Deficits in Medicated and Nonmedicated Parkinsonism. <i>Journal of Cognitive Neuroscience</i> , 2005, 17, 51-72.	2.3	818
7	Interactions between frontal cortex and basal ganglia in working memory: A computational model. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2001, 1, 137-160.	2.0	711
8	Computational psychiatry as a bridge from neuroscience to clinical applications. <i>Nature Neuroscience</i> , 2016, 19, 404-413.	14.8	708
9	From reinforcement learning models to psychiatric and neurological disorders. <i>Nature Neuroscience</i> , 2011, 14, 154-162.	14.8	641
10	HDDM: Hierarchical Bayesian estimation of the Drift-Diffusion Model in Python. <i>Frontiers in Neuroinformatics</i> , 2013, 7, 14.	2.5	627
11	Genetic triple dissociation reveals multiple roles for dopamine in reinforcement learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 16311-16316.	7.1	614
12	Hold your horses: A dynamic computational role for the subthalamic nucleus in decision making. <i>Neural Networks</i> , 2006, 19, 1120-1136.	5.9	587
13	Subthalamic nucleus stimulation reverses mediofrontal influence over decision threshold. <i>Nature Neuroscience</i> , 2011, 14, 1462-1467.	14.8	528
14	Anatomy of a decision: Striato-orbitofrontal interactions in reinforcement learning, decision making, and reversal. <i>Psychological Review</i> , 2006, 113, 300-326.	3.8	506
15	A mechanistic account of striatal dopamine function in human cognition: Psychopharmacological studies with cabergoline and haloperidol. <i>Behavioral Neuroscience</i> , 2006, 120, 497-517.	1.2	411
16	Prefrontal and striatal dopaminergic genes predict individual differences in exploration and exploitation. <i>Nature Neuroscience</i> , 2009, 12, 1062-1068.	14.8	409
17	Frontal theta links prediction errors to behavioral adaptation in reinforcement learning. <i>NeuroImage</i> , 2010, 49, 3198-3209.	4.2	376
18	Error-Related Negativity Predicts Reinforcement Learning and Conflict Biases. <i>Neuron</i> , 2005, 47, 495-501.	8.1	364

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19	Towards an executive without a homunculus: computational models of the prefrontal cortex/basal ganglia system. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2007, 362, 1601-1613.	4.0	355
20	Negative Symptoms of Schizophrenia Are Associated with Abnormal Effort-Cost Computations. <i>Biological Psychiatry</i> , 2013, 74, 130-136.	1.3	353
21	Opponent actor learning (OpAL): Modeling interactive effects of striatal dopamine on reinforcement learning and choice incentive.. <i>Psychological Review</i> , 2014, 121, 337-366.	3.8	350
22	Cognitive control over learning: Creating, clustering, and generalizing task-set structure.. <i>Psychological Review</i> , 2013, 120, 190-229.	3.8	331
23	A computational model of inhibitory control in frontal cortex and basal ganglia.. <i>Psychological Review</i> , 2013, 120, 329-355.	3.8	324
24	Striatal Dopamine Predicts Outcome-Specific Reversal Learning and Its Sensitivity to Dopaminergic Drug Administration. <i>Journal of Neuroscience</i> , 2009, 29, 1538-1543.	3.6	315
25	How much of reinforcement learning is working memory, not reinforcement learning? A behavioral, computational, and neurogenetic analysis. <i>European Journal of Neuroscience</i> , 2012, 35, 1024-1035.	2.6	301
26	Selective Reinforcement Learning Deficits in Schizophrenia Support Predictions from Computational Models of Striatal-Cortical Dysfunction. <i>Biological Psychiatry</i> , 2007, 62, 756-764.	1.3	283
27	Impulse control disorders and levodopa-induced dyskinesias in Parkinson's disease: an update. <i>Lancet Neurology</i> , The, 2017, 16, 238-250.	10.2	280
28	Negative Symptoms and the Failure to Represent the Expected Reward Value of Actions. <i>Archives of General Psychiatry</i> , 2012, 69, 129.	12.3	270
29	Banishing the homunculus: Making working memory work. <i>Neuroscience</i> , 2006, 139, 105-118.	2.3	268
30	Common medial frontal mechanisms of adaptive control in humans and rodents. <i>Nature Neuroscience</i> , 2013, 16, 1888-1895.	14.8	260
31	Seeing is believing: Trustworthiness as a dynamic belief. <i>Cognitive Psychology</i> , 2010, 61, 87-105.	2.2	259
32	Mechanisms of Hierarchical Reinforcement Learning in Corticostriatal Circuits 1: Computational Analysis. <i>Cerebral Cortex</i> , 2012, 22, 509-526.	2.9	246
33	Pupillometric and behavioral markers of a developmental shift in the temporal dynamics of cognitive control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5529-5533.	7.1	236
34	Rostrolateral Prefrontal Cortex and Individual Differences in Uncertainty-Driven Exploration. <i>Neuron</i> , 2012, 73, 595-607.	8.1	234
35	Motor symptoms in Parkinson's disease: A unified framework. <i>Neuroscience and Biobehavioral Reviews</i> , 2016, 68, 727-740.	6.1	231
36	Freezing of gait in Parkinson's disease is associated with functional decoupling between the cognitive control network and the basal ganglia. <i>Brain</i> , 2013, 136, 3671-3681.	7.6	222

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37	An Integrative Perspective on the Role of Dopamine in Schizophrenia. <i>Biological Psychiatry</i> , 2017, 81, 52-66.	1.3	220
38	Single dose of a dopamine agonist impairs reinforcement learning in humans: Behavioral evidence from a laboratory-based measure of reward responsiveness. <i>Psychopharmacology</i> , 2008, 196, 221-232.	3.1	217
39	Instructional control of reinforcement learning: A behavioral and neurocomputational investigation. <i>Brain Research</i> , 2009, 1299, 74-94.	2.2	217
40	Eye tracking and pupillometry are indicators of dissociable latent decision processes.. <i>Journal of Experimental Psychology: General</i> , 2014, 143, 1476-1488.	2.1	204
41	Dopamine promotes cognitive effort by biasing the benefits versus costs of cognitive work. <i>Science</i> , 2020, 367, 1362-1366.	12.6	204
42	Testing Computational Models of Dopamine and Noradrenaline Dysfunction in Attention Deficit/Hyperactivity Disorder. <i>Neuropsychopharmacology</i> , 2007, 32, 1583-1599.	5.4	200
43	fMRI and EEG Predictors of Dynamic Decision Parameters during Human Reinforcement Learning. <i>Journal of Neuroscience</i> , 2015, 35, 485-494.	3.6	200
44	Deficits in Positive Reinforcement Learning and Uncertainty-Driven Exploration Are Associated with Distinct Aspects of Negative Symptoms in Schizophrenia. <i>Biological Psychiatry</i> , 2011, 69, 424-431.	1.3	195
45	Frontal Theta Reflects Uncertainty and Unexpectedness during Exploration and Exploitation. <i>Cerebral Cortex</i> , 2012, 22, 2575-2586.	2.9	191
46	Neurocomputational models of basal ganglia function in learning, memory and choice. <i>Behavioural Brain Research</i> , 2009, 199, 141-156.	2.2	190
47	The drift diffusion model as the choice rule in reinforcement learning. <i>Psychonomic Bulletin and Review</i> , 2017, 24, 1234-1251.	2.8	186
48	Working Memory Contributions to Reinforcement Learning Impairments in Schizophrenia. <i>Journal of Neuroscience</i> , 2014, 34, 13747-13756.	3.6	175
49	Mechanisms of Hierarchical Reinforcement Learning in Cortico-Striatal Circuits 2: Evidence from fMRI. <i>Cerebral Cortex</i> , 2012, 22, 527-536.	2.9	171
50	Reinforcement-Based Decision Making in Corticostriatal Circuits: Mutual Constraints by Neurocomputational and Diffusion Models. <i>Neural Computation</i> , 2012, 24, 1186-1229.	2.2	169
51	Frontal Theta Overrides Pavlovian Learning Biases. <i>Journal of Neuroscience</i> , 2013, 33, 8541-8548.	3.6	168
52	Hippocampus, cortex, and basal ganglia: Insights from computational models of complementary learning systems. <i>Neurobiology of Learning and Memory</i> , 2004, 82, 253-267.	1.9	165
53	Neurogenetics and Pharmacology of Learning, Motivation, and Cognition. <i>Neuropsychopharmacology</i> , 2011, 36, 133-152.	5.4	163
54	A dopaminergic basis for working memory, learning and attentional shifting in Parkinsonism. <i>Neuropsychologia</i> , 2008, 46, 3144-3156.	1.6	162

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55	Computational models of motivated action selection in corticostriatal circuits. <i>Current Opinion in Neurobiology</i> , 2011, 21, 381-386.	4.2	162
56	Dopaminergic Genes Predict Individual Differences in Susceptibility to Confirmation Bias. <i>Journal of Neuroscience</i> , 2011, 31, 6188-6198.	3.6	156
57	Corticostriatal Output Gating during Selection from Working Memory. <i>Neuron</i> , 2014, 81, 930-942.	8.1	156
58	Charting the landscape of priority problems in psychiatry, part 1: classification and diagnosis. <i>Lancet Psychiatry</i> , 2016, 3, 77-83.	7.4	143
59	Understanding decision-making deficits in neurological conditions: insights from models of natural action selection. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2007, 362, 1641-1654.	4.0	142
60	Transitivity, flexibility, conjunctive representations, and the hippocampus. II. A computational analysis. <i>Hippocampus</i> , 2003, 13, 341-354.	1.9	136
61	When Memory Fails, Intuition Reigns. <i>Psychological Science</i> , 2006, 17, 700-707.	3.3	133
62	Striatal D1 and D2 signaling differentially predict learning from positive and negative outcomes. <i>NeuroImage</i> , 2015, 109, 95-101.	4.2	131
63	Model-Based Cognitive Neuroscience Approaches to Computational Psychiatry. <i>Clinical Psychological Science</i> , 2015, 3, 378-399.	4.0	127
64	Approach and avoidance learning in patients with major depression and healthy controls: relation to anhedonia. <i>Psychological Medicine</i> , 2010, 40, 433-440.	4.5	123
65	How Preparation Changes the Need for Top-Down Control of the Basal Ganglia When Inhibiting Premature Actions. <i>Journal of Neuroscience</i> , 2012, 32, 10870-10878.	3.6	121
66	Genetic contributions to avoidance-based decisions: striatal D2 receptor polymorphisms. <i>Neuroscience</i> , 2009, 164, 131-140.	2.3	118
67	Single dose of a dopamine agonist impairs reinforcement learning in humans: Evidence from event-related potentials and computational modeling of striatal-cortical function. <i>Human Brain Mapping</i> , 2009, 30, 1963-1976.	3.6	117
68	A Role for Dopamine in Temporal Decision Making and Reward Maximization in Parkinsonism. <i>Journal of Neuroscience</i> , 2008, 28, 12294-12304.	3.6	116
69	Altered probabilistic learning and response biases in schizophrenia: Behavioral evidence and neurocomputational modeling. <i>Neuropsychology</i> , 2011, 25, 86-97.	1.3	114
70	Wave-like dopamine dynamics as a mechanism for spatiotemporal credit assignment. <i>Cell</i> , 2021, 184, 2733-2749.e16.	28.9	112
71	Learning to avoid in older age. <i>Psychology and Aging</i> , 2008, 23, 392-398.	1.6	111
72	PVLV: The Primary Value and Learned Value Pavlovian Learning Algorithm. <i>Behavioral Neuroscience</i> , 2007, 121, 31-49.	1.2	103

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73	When logic fails: Implicit transitive inference in humans. <i>Memory and Cognition</i> , 2005, 33, 742-750.	1.6	100
74	Within- and across-trial dynamics of human EEG reveal cooperative interplay between reinforcement learning and working memory. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2502-2507.	7.1	99
75	Acute stress selectively reduces reward sensitivity. <i>Frontiers in Human Neuroscience</i> , 2013, 7, 133.	2.0	98
76	Variability in Dopamine Genes Dissociates Model-Based and Model-Free Reinforcement Learning. <i>Journal of Neuroscience</i> , 2016, 36, 1211-1222.	3.6	95
77	Task-related dissociation in ERN amplitude as a function of obsessive-compulsive symptoms. <i>Neuropsychologia</i> , 2009, 47, 1978-1987.	1.6	92
78	Stress modulates reinforcement learning in younger and older adults.. <i>Psychology and Aging</i> , 2013, 28, 35-46.	1.6	90
79	Differential, but not opponent, effects of l-DOPA and citalopram on action learning with reward and punishment. <i>Psychopharmacology</i> , 2014, 231, 955-966.	3.1	89
80	Effort Cost Computation in Schizophrenia: A Commentary on the Recent Literature. <i>Biological Psychiatry</i> , 2015, 78, 747-753.	1.3	88
81	Interactions Among Working Memory, Reinforcement Learning, and Effort in Value-Based Choice: A New Paradigm and Selective Deficits in Schizophrenia. <i>Biological Psychiatry</i> , 2017, 82, 431-439.	1.3	88
82	Neural mechanisms of acquired phasic dopamine responses in learning. <i>Neuroscience and Biobehavioral Reviews</i> , 2010, 34, 701-720.	6.1	87
83	Neurocomputational models of motor and cognitive deficits in Parkinson's disease. <i>Progress in Brain Research</i> , 2010, 183, 275-297.	1.4	87
84	Working Memory Load Strengthens Reward Prediction Errors. <i>Journal of Neuroscience</i> , 2017, 37, 4332-4342.	3.6	81
85	Multiple Systems in Decision Making. <i>Current Directions in Psychological Science</i> , 2009, 18, 73-77.	5.3	80
86	Probabilistic Reinforcement Learning in Patients With Schizophrenia: Relationships to Anhedonia and Avolition. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2016, 1, 460-473.	1.5	79
87	Social stress reactivity alters reward and punishment learning. <i>Social Cognitive and Affective Neuroscience</i> , 2011, 6, 311-320.	3.0	77
88	The role of frontostriatal impairment in freezing of gait in Parkinson's disease. <i>Frontiers in Systems Neuroscience</i> , 2013, 7, 61.	2.5	77
89	Human EEG Uncovers Latent Generalizable Rule Structure during Learning. <i>Journal of Neuroscience</i> , 2014, 34, 4677-4685.	3.6	77
90	Catecholaminergic challenge uncovers distinct Pavlovian and instrumental mechanisms of motivated (in)action. <i>ELife</i> , 2017, 6, .	6.0	77

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91	A Reinforcement Learning Mechanism Responsible for the Valuation of Free Choice. <i>Neuron</i> , 2014, 83, 551-557.	8.1	76
92	A Role for Dopamine-Mediated Learning in the Pathophysiology and Treatment of Parkinson's Disease. <i>Cell Reports</i> , 2012, 2, 1747-1761.	6.4	73
93	Conflict acts as an implicit cost in reinforcement learning. <i>Nature Communications</i> , 2014, 5, 5394.	12.8	72
94	Positive reward prediction errors during decision-making strengthen memory encoding. <i>Nature Human Behaviour</i> , 2019, 3, 719-732.	12.0	72
95	Dopaminergic basis for impairments in functional connectivity across subdivisions of the striatum in Parkinson's disease. <i>Human Brain Mapping</i> , 2015, 36, 1278-1291.	3.6	71
96	Cross-task individual differences in error processing: Neural, electrophysiological, and genetic components. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2007, 7, 297-308.	2.0	70
97	Advances in the computational understanding of mental illness. <i>Neuropsychopharmacology</i> , 2021, 46, 3-19.	5.4	70
98	A cholinergic feedback circuit to regulate striatal population uncertainty and optimize reinforcement learning. <i>ELife</i> , 2015, 4, .	6.0	69
99	Chunking as a rational strategy for lossy data compression in visual working memory.. <i>Psychological Review</i> , 2018, 125, 486-511.	3.8	67
100	Probabilistic reinforcement learning in adults with autism spectrum disorders. <i>Autism Research</i> , 2011, 4, 109-120.	3.8	66
101	Larger Error Signals in Major Depression are Associated with Better Avoidance Learning. <i>Frontiers in Psychology</i> , 2011, 2, 331.	2.1	63
102	Hierarchical Bayesian inference for concurrent model fitting and comparison for group studies. <i>PLoS Computational Biology</i> , 2019, 15, e1007043.	3.2	63
103	Dissociable responses to punishment in distinct striatal regions during reversal learning. <i>NeuroImage</i> , 2010, 51, 1459-1467.	4.2	62
104	Dopamine, Locus of Control, and the Exploration-Exploitation Tradeoff. <i>Neuropsychopharmacology</i> , 2015, 40, 454-462.	5.4	62
105	Estimating across-trial variability parameters of the Diffusion Decision Model: Expert advice and recommendations. <i>Journal of Mathematical Psychology</i> , 2018, 87, 46-75.	1.8	62
106	Multiple Dissociations Between Comorbid Depression and Anxiety on Reward and Punishment Processing: Evidence From Computationally Informed EEG. <i>Computational Psychiatry</i> , 2020, 3, 1.	2.0	62
107	Striatal dopaminergic modulation of reinforcement learning predicts reward-oriented behavior in daily life. <i>Biological Psychology</i> , 2017, 127, 1-9.	2.2	60
108	Spontaneous eye blink rate predicts learning from negative, but not positive, outcomes. <i>Neuropsychologia</i> , 2015, 71, 126-132.	1.6	59

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109	Taming the beast: extracting generalizable knowledge from computational models of cognition. <i>Current Opinion in Behavioral Sciences</i> , 2016, 11, 49-54.	3.9	56
110	Computational models of reinforcement learning: the role of dopamine as a reward signal. <i>Cognitive Neurodynamics</i> , 2010, 4, 91-105.	4.0	55
111	Role of Prefrontal Cortex in Learning and Generalizing Hierarchical Rules in 8-Month-Old Infants. <i>Journal of Neuroscience</i> , 2016, 36, 10314-10322.	3.6	54
112	Statistical context dictates the relationship between feedback-related EEG signals and learning. <i>ELife</i> , 2019, 8, .	6.0	53
113	CNTRICS Final Task Selection: Long-Term Memory. <i>Schizophrenia Bulletin</i> , 2009, 35, 197-212.	4.3	49
114	Patients With Schizophrenia Demonstrate Inconsistent Preference Judgments for Affective and Nonaffective Stimuli. <i>Schizophrenia Bulletin</i> , 2011, 37, 1295-1304.	4.3	47
115	Computational Psychiatry Needs Time and Context. <i>Annual Review of Psychology</i> , 2022, 73, 243-270.	17.7	47
116	The Subthalamic Nucleus Contributes to Post-error Slowing. <i>Journal of Cognitive Neuroscience</i> , 2014, 26, 2637-2644.	2.3	46
117	Charting the landscape of priority problems in psychiatry, part 2: pathogenesis and aetiology. <i>Lancet Psychiatry</i> , 2016, 3, 84-90.	7.4	46
118	Hypothetical decision making in schizophrenia: The role of expected value computation and irrational biases. <i>Psychiatry Research</i> , 2013, 209, 142-149.	3.3	44
119	The Case for Adaptive Neuromodulation to Treat Severe Intractable Mental Disorders. <i>Frontiers in Neuroscience</i> , 2019, 13, 152.	2.8	44
120	Biases in the Explore-Exploit Tradeoff in Addictions: The Role of Avoidance of Uncertainty. <i>Neuropsychopharmacology</i> , 2016, 41, 940-948.	5.4	43
121	Anxiety Impedes Adaptive Social Learning Under Uncertainty. <i>Psychological Science</i> , 2020, 31, 592-603.	3.3	43
122	Roles of D1-like dopamine receptors in the nucleus accumbens and dorsolateral striatum in conditioned avoidance responses. <i>Psychopharmacology</i> , 2012, 219, 159-169.	3.1	42
123	8-Month-Old Infants Spontaneously Learn and Generalize Hierarchical Rules. <i>Psychological Science</i> , 2015, 26, 805-815.	3.3	42
124	Altered cingulate sub-region activation accounts for task-related dissociation in ERN amplitude as a function of obsessive-compulsive symptoms. <i>Neuropsychologia</i> , 2010, 48, 2098-2109.	1.6	41
125	Sensitivity to reward and punishment in major depressive disorder: Effects of rumination and of single versus multiple experiences. <i>Cognition and Emotion</i> , 2012, 26, 1475-1485.	2.0	41
126	Dissecting the impact of depression on decision-making. <i>Psychological Medicine</i> , 2020, 50, 1613-1622.	4.5	41

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127	A neurocomputational account of catalepsy sensitization induced by D2 receptor blockade in rats: context dependency, extinction, and renewal. <i>Psychopharmacology</i> , 2009, 204, 265-277.	3.1	40
128	Compositional clustering in task structure learning. <i>PLoS Computational Biology</i> , 2018, 14, e1006116.	3.2	40
129	A Computational Cognitive Biomarker for Early-Stage Huntington's Disease. <i>PLoS ONE</i> , 2016, 11, e0148409.	2.5	40
130	Dopamine and proximity in motivation and cognitive control. <i>Current Opinion in Behavioral Sciences</i> , 2018, 22, 28-34.	3.9	39
131	A mosaic of cost-benefit control over cortico-striatal circuitry. <i>Trends in Cognitive Sciences</i> , 2021, 25, 710-721.	7.8	39
132	Pleasurable music affects reinforcement learning according to the listener. <i>Frontiers in Psychology</i> , 2013, 4, 541.	2.1	37
133	Identifying the neural correlates of doorway freezing in Parkinson's disease. <i>Human Brain Mapping</i> , 2019, 40, 2055-2064.	3.6	37
134	Feedback-Driven Trial-by-Trial Learning in Autism Spectrum Disorders. <i>American Journal of Psychiatry</i> , 2015, 172, 173-181.	7.2	36
135	Approach-Avoidance Conflict in Major Depressive Disorder: Congruent Neural Findings in Humans and Nonhuman Primates. <i>Biological Psychiatry</i> , 2020, 87, 399-408.	1.3	36
136	Realizing the Clinical Potential of Computational Psychiatry: Report From the Banbury Center Meeting, February 2019. <i>Biological Psychiatry</i> , 2020, 88, e5-e10.	1.3	36
137	Frontal network dynamics reflect neurocomputational mechanisms for reducing maladaptive biases in motivated action. <i>PLoS Biology</i> , 2018, 16, e2005979.	5.6	35
138	Schizophrenia: A Computational Reinforcement Learning Perspective. <i>Schizophrenia Bulletin</i> , 2008, 34, 1008-1011.	4.3	34
139	Theory-Based Computational Psychiatry. <i>Biological Psychiatry</i> , 2017, 82, 382-384.	1.3	34
140	How cognitive theory guides neuroscience. <i>Cognition</i> , 2015, 135, 14-20.	2.2	32
141	Likelihood approximation networks (LANs) for fast inference of simulation models in cognitive neuroscience. <i>ELife</i> , 2021, 10, .	6.0	32
142	Motivational Deficits in Schizophrenia Are Associated With Reduced Differentiation Between Gain and Loss-Avoidance Feedback in the Striatum. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2018, 3, 239-247.	1.5	31
143	Simultaneous Hierarchical Bayesian Parameter Estimation for Reinforcement Learning and Drift Diffusion Models: a Tutorial and Links to Neural Data. <i>Computational Brain & Behavior</i> , 2020, 3, 458-471.	1.7	31
144	All or nothing belief updating in patients with schizophrenia reduces precision and flexibility of beliefs. <i>Brain</i> , 2021, 144, 1013-1029.	7.6	30

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145	Interactionist Neuroscience. <i>Neuron</i> , 2015, 88, 855-860.	8.1	29
146	Surprise! Dopamine signals mix action, value and error. <i>Nature Neuroscience</i> , 2016, 19, 3-5.	14.8	28
147	Cross-Task Contributions of Frontobasal Ganglia Circuitry in Response Inhibition and Conflict-Induced Slowing. <i>Cerebral Cortex</i> , 2019, 29, 1969-1983.	2.9	28
148	Reduced susceptibility to confirmation bias in schizophrenia. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2014, 14, 715-728.	2.0	24
149	Analogous computations in working memory input, output and motor gating: Electrophysiological and computational modeling evidence. <i>PLoS Computational Biology</i> , 2021, 17, e1008971.	3.2	24
150	The basal ganglia in reward and decision making. , 2009, , 399-425.		23
151	Interrelations between cognitive dysfunction and motor symptoms of Parkinson's disease: behavioral and neural studies. <i>Reviews in the Neurosciences</i> , 2016, 27, 535-548.	2.9	23
152	Dopamine D2 agonist affects visuospatial working memory distractor interference depending on individual differences in baseline working memory span. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2018, 18, 509-520.	2.0	23
153	Reinforcement learning and higher level cognition: Introduction to special issue. <i>Cognition</i> , 2009, 113, 259-261.	2.2	22
154	CNTRICS Imaging Biomarkers Final Task Selection: Long-Term Memory and Reinforcement Learning. <i>Schizophrenia Bulletin</i> , 2012, 38, 62-72.	4.3	21
155	Transitive inference in adults with autism spectrum disorders. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2011, 11, 437-449.	2.0	20
156	Motivational deficits in schizophrenia relate to abnormalities in cortical learning rate signals. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2018, 18, 1338-1351.	2.0	20
157	Computational phenotyping of brain-behavior dynamics underlying approach-avoidance conflict in major depressive disorder. <i>PLoS Computational Biology</i> , 2021, 17, e1008955.	3.2	20
158	Reduction of Pavlovian Bias in Schizophrenia: Enhanced Effects in Clozapine-Administered Patients. <i>PLoS ONE</i> , 2016, 11, e0152781.	2.5	19
159	Generalizing to generalize: Humans flexibly switch between compositional and conjunctive structures during reinforcement learning. <i>PLoS Computational Biology</i> , 2020, 16, e1007720.	3.2	18
160	Reward-predictive representations generalize across tasks in reinforcement learning. <i>PLoS Computational Biology</i> , 2020, 16, e1008317.	3.2	17
161	Optimizing vs. Matching: Response Strategy in a Probabilistic Learning Task is associated with Negative Symptoms of Schizophrenia. <i>Schizophrenia Research</i> , 2011, 127, 215-222.	2.0	16
162	A Control Theoretic Model of Adaptive Learning in Dynamic Environments. <i>Journal of Cognitive Neuroscience</i> , 2018, 30, 1405-1421.	2.3	16

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163	Impaired Expected Value Computations Coupled With Overreliance on Stimulus-Response Learning in Schizophrenia. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2018, 3, 916-926.	1.5	14
164	Intact striatal dopaminergic modulation of reward learning and daily-life reward-oriented behavior in first-degree relatives of individuals with psychotic disorder. <i>Psychological Medicine</i> , 2018, 48, 1909-1914.	4.5	14
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