Peter D Dayan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8844944/publications.pdf

Version: 2024-02-01

249 papers 49,670 citations

4658 85 h-index 206 g-index

302 all docs 302 docs citations

times ranked

302

28127 citing authors

#	Article	IF	CITATIONS
1	A comparison of â€~pruning' during multi-step planning in depressed and healthy individuals. Psychological Medicine, 2022, 52, 3948-3956.	4.5	2
2	Peril, prudence and planning as risk, avoidance and worry. Journal of Mathematical Psychology, 2022, 106, 102617.	1.8	6
3	When unsupervised training benefits category learning. Cognition, 2022, 221, 104984.	2.2	6
4	"Liking―as an early and editable draft of long-run affective value. PLoS Biology, 2022, 20, e3001476.	5.6	8
5	Optimism and pessimism in optimised replay. PLoS Computational Biology, 2022, 18, e1009634.	3.2	8
6	Spatial preferences account for inter-animal variability during the continual learning of a dynamic cognitive task. Cell Reports, 2022, 39, 110708.	6.4	4
7	Neurofeedback through the lens of reinforcement learning. Trends in Neurosciences, 2022, 45, 579-593.	8.6	18
8	Explicit knowledge of task structure is a primary determinant of human model-based action. Nature Human Behaviour, 2022, 6, 1126-1141.	12.0	10
9	Freezing revisited: coordinated autonomic and central optimization of threat coping. Nature Reviews Neuroscience, 2022, 23, 568-580.	10.2	42
10	A computational model of aesthetic value Psychological Review, 2022, 129, 1319-1337.	3.8	17
11	The Anterior Cingulate Cortex Predicts Future States to Mediate Model-Based Action Selection. Neuron, 2021, 109, 149-163.e7.	8.1	64
12	When will's wont wants wanting. Behavioral and Brain Sciences, 2021, 44, e35.	0.7	1
13	Human subjects exploit a cognitive map for credit assignment. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	11
14	Dissecting the links between reward and loss, decision-making, and self-reported affect using a computational approach. PLoS Computational Biology, 2021, 17, e1008555.	3.2	9
15	Efficiency and prioritization of inference-based credit assignment. Current Biology, 2021, 31, 2747-2756.e6.	3.9	2
16	Internality and the internalisation of failure: Evidence from a novel task. PLoS Computational Biology, 2021, 17, e1009134.	3.2	0
17	Using Primary Reinforcement to Enhance Translatability of a Human Affect and Decision-Making Judgment Bias Task. Journal of Cognitive Neuroscience, 2021, 33, 2523-2535.	2.3	4
18	Control over patch encounters changes foraging behavior. IScience, 2021, 24, 103005.	4.1	12

#	Article	IF	Citations
19	Neural encoding of perceived patch value during competitive and hazardous virtual foraging. Nature Communications, 2021, 12, 5478.	12.8	10
20	Humans use forward thinking to exploit social controllability. ELife, 2021, 10, .	6.0	14
21	Dopamine enhances model-free credit assignment through boosting of retrospective model-based inference. ELife, 2021, 10, .	6.0	6
22	Liking. Current Biology, 2021, 31, R1555-R1557.	3.9	10
23	Dissociating neural learning signals in human sign- and goal-trackers. Nature Human Behaviour, 2020, 4, 201-214.	12.0	51
24	Short-Term Fasting Selectively Influences Impulsivity in Healthy Individuals. Frontiers in Psychology, 2020, 11, 1644.	2.1	7
25	Reward and punisher experience alter rodent decision-making in a judgement bias task. Scientific Reports, 2020, 10, 11839.	3.3	10
26	Memory Alone Does Not Account for the Way Rats Learn a Simple Spatial Alternation Task. Journal of Neuroscience, 2020, 40, 7311-7317.	3.6	8
27	Computational Psychiatry for Computers. IScience, 2020, 23, 101772.	4.1	7
28	Adversarial vulnerabilities of human decision-making. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29221-29228.	7.1	15
29	Combined model-free and model-sensitive reinforcement learning in non-human primates. PLoS Computational Biology, 2020, 16, e1007944.	3.2	17
30	The value of what's to come: Neural mechanisms coupling prediction error and the utility of anticipation. Science Advances, 2020, 6, eaba3828.	10.3	47
31	Realizing the Clinical Potential of Computational Psychiatry: Report From the Banbury Center Meeting, February 2019. Biological Psychiatry, 2020, 88, e5-e10.	1.3	36
32	Uncertainty in learning, choice, and visual fixation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3291-3300.	7.1	15
33	Space, Time, and Fear: Survival Computations along Defensive Circuits. Trends in Cognitive Sciences, 2020, 24, 228-241.	7.8	138
34	The roles of online and offline replay in planning. ELife, 2020, 9, .	6.0	40
35	Impaired adaptation of learning to contingency volatility in internalizing psychopathology. ELife, 2020, 9, .	6.0	48
36	Representation, abstraction, and simple-minded sophisticates. Behavioral and Brain Sciences, 2020, 43, e126.	0.7	0

#	Article	IF	Citations
37	Combined model-free and model-sensitive reinforcement learning in non-human primates. , 2020, 16, e1007944.		O
38	Combined model-free and model-sensitive reinforcement learning in non-human primates. , 2020, 16, e1007944.		0
39	Combined model-free and model-sensitive reinforcement learning in non-human primates. , 2020, 16, e1007944.		0
40	Combined model-free and model-sensitive reinforcement learning in non-human primates. , 2020, 16, e1007944.		0
41	Backtracking during navigation is correlated with enhanced anterior cingulate activity and suppression of alpha oscillations and the †default-mode' network. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191016.	2.6	17
42	Learning to use past evidence in a sophisticated world model. PLoS Computational Biology, 2019, 15, e1007093.	3.2	4
43	A computational account of threat-related attentional bias. PLoS Computational Biology, 2019, 15, e1007341.	3.2	31
44	Pupil-linked phasic arousal evoked by violation but not emergence of regularity within rapid sound sequences. Nature Communications, 2019, 10, 4030.	12.8	60
45	Altered learning under uncertainty in unmedicated mood and anxiety disorders. Nature Human Behaviour, 2019, 3, 1116-1123.	12.0	87
46	Models that learn how humans learn: The case of decision-making and its disorders. PLoS Computational Biology, 2019, 15, e1006903.	3.2	33
47	Prefrontal Dynamics Associated with Efficient Detours and Shortcuts: A Combined Functional Magnetic Resonance Imaging and Magnetoencenphalography Study. Journal of Cognitive Neuroscience, 2019, 31, 1227-1247.	2.3	28
48	Forming global estimates of self-performance from local confidence. Nature Communications, 2019, 10, 1141.	12.8	59
49	Retrospective model-based inference guides model-free credit assignment. Nature Communications, 2019, 10, 750.	12.8	24
50	Pavlovian-instrumental interactions in active avoidance: The bark of neutral trials. Brain Research, 2019, 1713, 52-61.	2.2	7
51	How do people learn how to plan?. , 2019, , .		5
52	Locus coeruleus integrity in old age is selectively related to memories linked with salient negative events. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2228-2233.	7.1	104
53	The Protective Action Encoding of Serotonin Transients in the Human Brain. Neuropsychopharmacology, 2018, 43, 1425-1435.	5.4	70
54	Learning Contextual Reward Expectations for Value Adaptation. Journal of Cognitive Neuroscience, 2018, 30, 50-69.	2.3	11

#	Article	IF	CITATIONS
55	Forget-me-some: General versus special purpose models in a hierarchical probabilistic task. PLoS ONE, 2018, 13, e0205974.	2.5	7
56	Early childhood investment impacts social decision-making four decades later. Nature Communications, 2018, 9, 4705.	12.8	17
57	Change, stability, and instability in the Pavlovian guidance of behaviour from adolescence to young adulthood. PLoS Computational Biology, 2018, 14, e1006679.	3.2	39
58	Assessing animal affect: an automated and self-initiated judgement bias task based on natural investigative behaviour. Scientific Reports, 2018, 8, 12400.	3.3	24
59	Magnetoencephalography decoding reveals structural differences within integrative decision processes. Nature Human Behaviour, 2018, 2, 670-681.	12.0	19
60	Control of neurite growth and guidance by an inhibitory cell-body signal. PLoS Computational Biology, 2018, 14, e1006218.	3.2	10
61	An effect of serotonergic stimulation on learning rates for rewards apparent after long intertrial intervals. Nature Communications, 2018, 9, 2477.	12.8	75
62	When planning to survive goes wrong: predicting the future and replaying the past in anxiety and PTSD. Current Opinion in Behavioral Sciences, 2018, 24, 89-95.	3.9	43
63	Beta-Blocker Propranolol Modulates Decision Urgency During Sequential Information Gathering. Journal of Neuroscience, 2018, 38, 7170-7178.	3.6	32
64	Decodability of Reward Learning Signals Predicts Mood Fluctuations. Current Biology, 2018, 28, 1433-1439.e7.	3.9	51
65	Foraging for foundations in decision neuroscience: insights from ethology. Nature Reviews Neuroscience, 2018, 19, 419-427.	10.2	140
66	Interrupting behaviour: Minimizing decision costs via temporal commitment and low-level interrupts. PLoS Computational Biology, 2018, 14, e1005916.	3.2	17
67	A model of risk and mental state shifts during social interaction. PLoS Computational Biology, 2018, 14, e1005935.	3.2	29
68	Parsing the Role of the Hippocampus in Approach–Avoidance Conflict. Cerebral Cortex, 2017, 27, 201-215.	2.9	27
69	Peripheral Serotonin 1B Receptor Transcription Predicts the Effect of Acute Tryptophan Depletion on Risky Decision-Making. International Journal of Neuropsychopharmacology, 2017, 20, pyw075.	2.1	5
70	Modeling Avoidance in Mood and Anxiety Disorders Using Reinforcement Learning. Biological Psychiatry, 2017, 82, 532-539.	1.3	96
71	Moral transgressions corrupt neural representations of value. Nature Neuroscience, 2017, 20, 879-885.	14.8	108
72	Algorithms for survival: a comparative perspective on emotions. Nature Reviews Neuroscience, 2017, 18, 311-319.	10.2	99

#	Article	IF	CITATIONS
73	Prior preferences beneficially influence social and non-social learning. Nature Communications, 2017, 8, 817.	12.8	20
74	Light Dominates Peripheral Circadian Oscillations in Drosophila melanogaster During Sensory Conflict. Journal of Biological Rhythms, 2017, 32, 423-432.	2.6	13
75	The Neural Basis of Aversive Pavlovian Guidance during Planning. Journal of Neuroscience, 2017, 37, 10215-10229.	3.6	15
76	Pavlovian influences on learning differ between rats and mice in a counter-balanced Go/NoGo judgement bias task. Behavioural Brain Research, 2017, 331, 214-224.	2.2	26
77	Association of Neural and Emotional Impacts of Reward Prediction Errors With Major Depression. JAMA Psychiatry, 2017, 74, 790.	11.0	150
78	Formalizing Neurath's ship: Approximate algorithms for online causal learning Psychological Review, 2017, 124, 301-338.	3.8	81
79	Increased decision thresholds trigger extended information gathering across the compulsivity spectrum. Translational Psychiatry, 2017, 7, 1296.	4.8	41
80	Increased decision thresholds enhance information gathering performance in juvenile Obsessive-Compulsive Disorder (OCD). PLoS Computational Biology, 2017, 13, e1005440.	3.2	54
81	Attenuation of dopamine-modulated prefrontal value signals underlies probabilistic reward learning deficits in old age. ELife, 2017, 6, .	6.0	37
82	The modulation of savouring by prediction error and its effects on choice. ELife, 2016, 5, .	6.0	72
83	How People Use Social Information to Find out What to Want in the Paradigmatic Case of Inter-temporal Preferences. PLoS Computational Biology, 2016, 12, e1004965.	3.2	37
84	Cognitive Bias in Ambiguity Judgements: Using Computational Models to Dissect the Effects of Mild Mood Manipulation in Humans. PLoS ONE, 2016, 11, e0165840.	2.5	27
85	Computations Underlying Social Hierarchy Learning: Distinct Neural Mechanisms for Updating and Representing Self-Relevant Information. Neuron, 2016, 92, 1135-1147.	8.1	117
86	Multiple value signals in dopaminergic midbrain and their role in avoidance contexts. NeuroImage, 2016, 135, 197-203.	4.2	11
87	The influence of contextual reward statistics on risk preference. Neurolmage, 2016, 128, 74-84.	4.2	35
88	The Dopaminergic Midbrain Mediates an Effect of Average Reward on Pavlovian Vigor. Journal of Cognitive Neuroscience, 2016, 28, 1303-1317.	2.3	26
89	Dopamine Increases a Value-Independent Gambling Propensity. Neuropsychopharmacology, 2016, 41, 2658-2667.	5.4	58
90	Striatal structure and function predict individual biases in learning to avoid pain. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4812-4817.	7.1	63

#	Article	IF	CITATIONS
91	Fast Sequences of Non-spatial State Representations in Humans. Neuron, 2016, 91, 194-204.	8.1	148
92	Sensory Conflict Disrupts Activity of the Drosophila Circadian Network. Cell Reports, 2016, 17, 1711-1718.	6.4	30
93	The social contingency of momentary subjective well-being. Nature Communications, 2016, 7, 11825.	12.8	27
94	Adaptive integration of habits into depth-limited planning defines a habitual-goal–directed spectrum. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12868-12873.	7.1	137
95	Deep brain stimulation of the subthalamic nucleus modulates sensitivity to decision outcome value in Parkinson's disease. Scientific Reports, 2016, 6, 32509.	3.3	17
96	Safety out of control: dopamine and defence. Behavioral and Brain Functions, 2016, 12, 15.	3.3	43
97	Risk Taking for Potential Reward Decreases across the Lifespan. Current Biology, 2016, 26, 1634-1639.	3.9	85
98	Charting the landscape of priority problems in psychiatry, part 2: pathogenesis and aetiology. Lancet Psychiatry, the, 2016, 3, 84-90.	7.4	46
99	Charting the landscape of priority problems in psychiatry, part 1: classification and diagnosis. Lancet Psychiatry, the, 2016, 3, 77-83.	7.4	143
100	Pharmacological Fingerprints of Contextual Uncertainty. PLoS Biology, 2016, 14, e1002575.	5.6	91
101	Monte Carlo Planning Method Estimates Planning Horizons during Interactive Social Exchange. PLoS Computational Biology, 2015, 11, e1004254.	3.2	33
102	Simple Plans or Sophisticated Habits? State, Transition and Learning Interactions in the Two-Step Task. PLoS Computational Biology, 2015, 11, e1004648.	3.2	94
103	The three R's of trust. Current Opinion in Behavioral Sciences, 2015, 3, 102-106.	3.9	8
104	Depression: A Decision-Theoretic Analysis. Annual Review of Neuroscience, 2015, 38, 1-23.	10.7	150
105	Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making. Current Biology, 2015, 25, 1852-1859.	3.9	119
106	A Probabilistic Palimpsest Model of Visual Short-term Memory. PLoS Computational Biology, 2015, 11, e1004003.	3.2	46
107	Anticipation and Choice Heuristics in the Dynamic Consumption of Pain Relief. PLoS Computational Biology, 2015, 11, e1004030.	3.2	4
108	The limits of chemosensation vary across dimensions. Nature Communications, 2015, 6, 7468.	12.8	19

#	Article	IF	Citations
109	Interplay of approximate planning strategies. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3098-3103.	7.1	145
110	Necessary, Yet Dissociable Contributions of the Insular and Ventromedial Prefrontal Cortices to Norm Adaptation: Computational and Lesion Evidence in Humans. Journal of Neuroscience, 2015, 35, 467-473.	3.6	77
111	Decision-Theoretic Psychiatry. Clinical Psychological Science, 2015, 3, 400-421.	4.0	58
112	Taming the shrewdness of neural function: methodological challenges in computational psychiatry. Current Opinion in Behavioral Sciences, 2015, 5, 128-132.	3.9	8
113	Dopaminergic Modulation of Decision Making and Subjective Well-Being. Journal of Neuroscience, 2015, 35, 9811-9822.	3.6	174
114	Tamping Ramping: Algorithmic, Implementational, and Computational Explanations of Phasic Dopamine Signals in the Accumbens. PLoS Computational Biology, 2015, 11, e1004622.	3.2	43
115	Temporal structure in associative retrieval. ELife, 2015, 4, .	6.0	56
116	Serotonin's many meanings elude simple theories. ELife, 2015, 4, .	6.0	34
117	When Money Is Not Enough: Awareness, Success, and Variability in Motor Learning. PLoS ONE, 2014, 9, e86580.	2.5	39
118	Some Work and Some Play: Microscopic and Macroscopic Approaches to Labor and Leisure. PLoS Computational Biology, 2014, 10, e1003894.	3.2	10
119	Nonpolitical Images Evoke Neural Predictors of Political Ideology. Current Biology, 2014, 24, 2693-2699.	3.9	100
120	Optimal Recall from Bounded Metaplastic Synapses: Predicting Functional Adaptations in Hippocampal Area CA3. PLoS Computational Biology, 2014, 10, e1003489.	3.2	17
121	The habenula encodes negative motivational value associated with primary punishment in humans. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11858-11863.	7.1	116
122	Harm to others outweighs harm to self in moral decision making. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17320-17325.	7.1	224
123	Optimal indolence: a normative microscopic approach to work and leisure. Journal of the Royal Society Interface, 2014, 11, 20130969.	3.4	16
124	Differential, but not opponent, effects of l-DOPA and citalopram on action learning with reward and punishment. Psychopharmacology, 2014, 231, 955-966.	3.1	89
125	The algorithmic anatomy of model-based evaluation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130478.	4.0	144
126	Rationalizable Irrationalities of Choice. Topics in Cognitive Science, 2014, 6, 204-228.	1.9	24

#	Article	IF	Citations
127	A computational and neural model of momentary subjective well-being. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12252-12257.	7.1	322
128	The influence of receptor positioning on chemotactic information. Journal of Theoretical Biology, 2014, 360, 95-101.	1.7	7
129	Model-based and model-free Pavlovian reward learning: Revaluation, revision, and revelation. Cognitive, Affective and Behavioral Neuroscience, 2014, 14, 473-492.	2.0	257
130	Action versus valence in decision making. Trends in Cognitive Sciences, 2014, 18, 194-202.	7.8	223
131	Mapping anhedonia onto reinforcement learning: a behavioural meta-analysis. Biology of Mood & Anxiety Disorders, 2013, 3, 12.	4.7	353
132	Dopamine Modulates Reward-Related Vigor. Neuropsychopharmacology, 2013, 38, 1495-1503.	5.4	187
133	Goals and Habits in the Brain. Neuron, 2013, 80, 312-325.	8.1	799
134	Dopamine restores reward prediction errors in old age. Nature Neuroscience, 2013, 16, 648-653.	14.8	233
135	Effort and Valuation in the Brain: The Effects of Anticipation and Execution. Journal of Neuroscience, 2013, 33, 6160-6169.	3.6	145
136	Sparse Coding Can Predict Primary Visual Cortex Receptive Field Changes Induced by Abnormal Visual Input. PLoS Computational Biology, 2013, 9, e1003005.	3.2	32
137	Exploration from Generalization Mediated by Multiple Controllers. , 2013, , 73-91.		10
138	Cortical Surround Interactions and Perceptual Salience via Natural Scene Statistics. PLoS Computational Biology, 2012, 8, e1002405.	3.2	89
139	Bonsai Trees in Your Head: How the Pavlovian System Sculpts Goal-Directed Choices by Pruning Decision Trees. PLoS Computational Biology, 2012, 8, e1002410.	3.2	314
140	Computational Phenotyping of Two-Person Interactions Reveals Differential Neural Response to Depth-of-Thought. PLoS Computational Biology, 2012, 8, e1002841.	3.2	62
141	Serotonin Selectively Modulates Reward Value in Human Decision-Making. Journal of Neuroscience, 2012, 32, 5833-5842.	3.6	211
142	Dopamine and performance in a reinforcement learning task: evidence from Parkinson's disease. Brain, 2012, 135, 1871-1883.	7.6	137
143	Neural Prediction Errors Reveal a Risk-Sensitive Reinforcement-Learning Process in the Human Brain. Journal of Neuroscience, 2012, 32, 551-562.	3.6	293
144	Action controls dopaminergic enhancement of reward representations. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7511-7516.	7.1	102

#	Article	lF	CITATIONS
145	How to set the switches on this thing. Current Opinion in Neurobiology, 2012, 22, 1068-1074.	4.2	83
146	Computational psychiatry. Trends in Cognitive Sciences, 2012, 16, 72-80.	7.8	645
147	Mapping value based planning and extensively trained choice in the human brain. Nature Neuroscience, 2012, 15, 786-791.	14.8	259
148	A Step-by-Step Guide to Dopamine. Biological Psychiatry, 2012, 71, 842-843.	1.3	3
149	Go and no-go learning in reward and punishment: Interactions between affect and effect. Neurolmage, 2012, 62, 154-166.	4.2	328
150	Twenty-Five Lessons from Computational Neuromodulation. Neuron, 2012, 76, 240-256.	8.1	145
151	The Effect of Motivation on Movement: A Study of Bradykinesia in Parkinson's Disease. PLoS ONE, 2012, 7, e47138.	2.5	28
152	Models of Value and Choice. , 2012, , 33-52.		6
153	Instrumental vigour in punishment and reward. European Journal of Neuroscience, 2012, 35, 1152-1168.	2.6	66
154	Opponency Revisited: Competition and Cooperation Between Dopamine and Serotonin. Neuropsychopharmacology, 2011, 36, 74-97.	5.4	389
155	Model-Based Influences on Humans' Choices and Striatal Prediction Errors. Neuron, 2011, 69, 1204-1215.	8.1	1,388
156	Optimal decisions for contrast discrimination. Journal of Vision, 2011, 11, 9-9.	0.3	7
157	Action Dominates Valence in Anticipatory Representations in the Human Striatum and Dopaminergic Midbrain. Journal of Neuroscience, 2011, 31, 7867-7875.	3.6	202
158	Bayesian modelling of Jumping-to-Conclusions bias in delusional patients. Cognitive Neuropsychiatry, 2011, 16, 422-447.	1.3	115
159	Disentangling the Roles of Approach, Activation and Valence in Instrumental and Pavlovian Responding. PLoS Computational Biology, 2011, 7, e1002028.	3.2	292
160	Vigor in the Face of Fluctuating Rates of Reward: An Experimental Examination. Journal of Cognitive Neuroscience, 2011, 23, 3933-3938.	2.3	77
161	Selective Bayes: Attentional load and crowding. Vision Research, 2010, 50, 2248-2260.	1.4	36
162	A common mechanism for adaptive scaling of reward and novelty. Human Brain Mapping, 2010, 31, 1380-1394.	3.6	80

#	Article	IF	CITATIONS
163	Synapses with short-term plasticity are optimal estimators of presynaptic membrane potentials. Nature Neuroscience, 2010, 13, 1271-1275.	14.8	61
164	Pavlovian-Instrumental Interaction in â€~Observing Behavior'. PLoS Computational Biology, 2010, 6, e1000903.	3.2	34
165	States versus Rewards: Dissociable Neural Prediction Error Signals Underlying Model-Based and Model-Free Reinforcement Learning. Neuron, 2010, 66, 585-595.	8.1	935
166	A Bayesian model predicts the response of axons to molecular gradients. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10296-10301.	7.1	123
167	The Role of Background Statistics in Face Adaptation. Journal of Neuroscience, 2009, 29, 12035-12044.	3.6	7
168	How Humans Integrate the Prospects of Pain and Reward during Choice. Journal of Neuroscience, 2009, 29, 14617-14626.	3.6	184
169	Prospective and retrospective temporal difference learning. Network: Computation in Neural Systems, 2009, 20, 32-46.	3.6	9
170	Dopamine, Reinforcement Learning, and Addiction. Pharmacopsychiatry, 2009, 42, S56-S65.	3.3	68
171	A Bayesian formulation of behavioral control. Cognition, 2009, 113, 314-328.	2.2	113
172	Goal-directed control and its antipodes. Neural Networks, 2009, 22, 213-219.	5.9	76
173	Perceptual organization in the tilt illusion. Journal of Vision, 2009, 9, 19-19.	0.3	78
174	Serotonin in Affective Control. Annual Review of Neuroscience, 2009, 32, 95-126.	10.7	301
175	Flexible shaping: How learning in small steps helps. Cognition, 2009, 110, 380-394.	2.2	133
176	Dynamics of attentional selection under conflict: Toward a rational Bayesian account Journal of Experimental Psychology: Human Perception and Performance, 2009, 35, 700-717.	0.9	91
177	Values and Actions in Aversion. , 2009, , 175-191.		36
178	Decision theory, reinforcement learning, and the brain. Cognitive, Affective and Behavioral Neuroscience, 2008, 8, 429-453.	2.0	427
179	Reinforcement learning: The Good, The Bad and The Ugly. Current Opinion in Neurobiology, 2008, 18, 185-196.	4.2	803
180	A temporal difference account of avoidance learning. Network: Computation in Neural Systems, 2008, 19, 137-160.	3.6	73

#	Article	IF	Citations
181	Adaptation across the Cortical Hierarchy: Low-Level Curve Adaptation Affects High-Level Facial-Expression Judgments. Journal of Neuroscience, 2008, 28, 3374-3383.	3.6	92
182	Serotonin, Inhibition, and Negative Mood. PLoS Computational Biology, 2008, 4, e4.	3.2	200
183	Human Pavlovian–Instrumental Transfer. Journal of Neuroscience, 2008, 28, 360-368.	3.6	264
184	Simple substrates for complex cognition. Frontiers in Neuroscience, 2008, 2, 255-263.	2.8	67
185	Semi-rational models of conditioning:. , 2008, , 431-452.		26
186	The Role of Value Systems in Decision Making. , 2008, , 51-70.		20
187	Fast Population Coding. Neural Computation, 2007, 19, 404-441.	2.2	51
188	Differential Encoding of Losses and Gains in the Human Striatum. Journal of Neuroscience, 2007, 27, 4826-4831.	3.6	396
189	Persecutory delusions and the conditioned avoidance paradigm: Towards an integration of the psychology and biology of paranoia. Cognitive Neuropsychiatry, 2007, 12, 495-510.	1.3	69
190	Bilinearity, rules, and prefrontal cortex. Frontiers in Computational Neuroscience, 2007, 1, 1.	2.1	44
191	Space and time in visual context. Nature Reviews Neuroscience, 2007, 8, 522-535.	10.2	321
192	An unsupervised learning model of neural plasticity: Orientation selectivity in goggle-reared kittens. Vision Research, 2007, 47, 2868-2877.	1.4	10
193	Tonic dopamine: opportunity costs and the control of response vigor. Psychopharmacology, 2007, 191, 507-520.	3.1	969
194	Phasic norepinephrine: A neural interrupt signal for unexpected events. Network: Computation in Neural Systems, 2006, 17, 335-350.	3.6	249
195	A normative perspective on motivation. Trends in Cognitive Sciences, 2006, 10, 375-381.	7.8	268
196	Choice values. Nature Neuroscience, 2006, 9, 987-988.	14.8	76
197	Cortical substrates for exploratory decisions in humans. Nature, 2006, 441, 876-879.	27.8	1,790
198	The misbehavior of value and the discipline of the will. Neural Networks, 2006, 19, 1153-1160.	5.9	310

#	Article	IF	CITATIONS
199	Dopamine modulation in the basal ganglia locks the gate to working memory. Journal of Computational Neuroscience, 2006, 20, 153-166.	1.0	169
200	Images, Frames, and Connectionist Hierarchies. Neural Computation, 2006, 18, 2293-2319.	2.2	9
201	Soft Mixer Assignment in a Hierarchical Generative Model of Natural Scene Statistics. Neural Computation, 2006, 18, 2680-2718.	2.2	29
202	Touché: the feeling of choice. Nature Neuroscience, 2005, 8, 408-409.	14.8	3
203	Uncertainty-based competition between prefrontal and dorsolateral striatal systems for behavioral control. Nature Neuroscience, 2005, 8, 1704-1711.	14.8	2,108
204	Matching storage and recall: hippocampal spike timing–dependent plasticity and phase response curves. Nature Neuroscience, 2005, 8, 1677-1683.	14.8	112
205	Uncertainty, Neuromodulation, and Attention. Neuron, 2005, 46, 681-692.	8.1	1,444
206	Dopamine, uncertainty and TD learning. Behavioral and Brain Functions, 2005, 1, 6.	3.3	113
207	Dopamine, Learning, and Impulsivity: ABiological Account of Attention-Deficit/Hyperactivity Disorder. Journal of Child and Adolescent Psychopharmacology, 2005, 15, 160-179.	1.3	92
208	Attention in Conditioning. , 2005, , 213-218.		0
208	Attention in Conditioning. , 2005, , 213-218. Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294.	14.8	163
	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions.	14.8 27.8	
209	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294.		163
209	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294. Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667. Dissociable Roles of Ventral and Dorsal Striatum in Instrumental Conditioning. Science, 2004, 304,	27.8	163 557
209 210 211	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294. Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667. Dissociable Roles of Ventral and Dorsal Striatum in Instrumental Conditioning. Science, 2004, 304, 452-454.	27.8	163 557 1,894
209 210 211 212	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294. Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667. Dissociable Roles of Ventral and Dorsal Striatum in Instrumental Conditioning. Science, 2004, 304, 452-454. Pattern formation and cortical maps. Journal of Physiology (Paris), 2003, 97, 475-489.	27.8 12.6 2.1	163 557 1,894
209 210 211 212 213	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294. Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667. Dissociable Roles of Ventral and Dorsal Striatum in Instrumental Conditioning. Science, 2004, 304, 452-454. Pattern formation and cortical maps. Journal of Physiology (Paris), 2003, 97, 475-489. Temporal Difference Models and Reward-Related Learning in the Human Brain. Neuron, 2003, 38, 329-337. INFERENCE ANDCOMPUTATION WITHPOPULATIONCODES. Annual Review of Neuroscience, 2003, 26,	27.8 12.6 2.1 8.1	163 557 1,894 6

#	Article	IF	CITATIONS
217	Nonlinear ideal observation and recurrent preprocessing in perceptual learning. Network: Computation in Neural Systems, 2003, 14, 233-247.	3.6	40
218	Nonlinear ideal observation and recurrent preprocessing in perceptual learning. Network: Computation in Neural Systems, 2003, 14, 233-247.	3.6	24
219	Acquisition and extinction in autoshaping Psychological Review, 2002, 109, 533-544.	3.8	110
220	Reward, Motivation, and Reinforcement Learning. Neuron, 2002, 36, 285-298.	8.1	743
221	Matters temporal. Trends in Cognitive Sciences, 2002, 6, 105-106.	7.8	17
222	Opponent interactions between serotonin and dopamine. Neural Networks, 2002, 15, 603-616.	5.9	744
223	Acetylcholine in cortical inference. Neural Networks, 2002, 15, 719-730.	5.9	200
224	Dopamine: generalization and bonuses. Neural Networks, 2002, 15, 549-559.	5.9	388
225	Structure in the Space of Value Functions. Machine Learning, 2002, 49, 325-346.	5. 4	26
226	A model of hippocampally dependent navigation, using the temporal difference learning rule., 2000, 10, 1-16.		224
227	Learning and selective attention. Nature Neuroscience, 2000, 3, 1218-1223.	14.8	424
228	Information processing with population codes. Nature Reviews Neuroscience, 2000, 1, 125-132.	10.2	610
229	Fast oscillations in cortical circuits. Network: Computation in Neural Systems, 2000, 11, 333-334.	3.6	0
230	The Involvement of Recurrent Connections in Area CA3 in Establishing the Properties of Place Fields: a Model. Journal of Neuroscience, 2000, 20, 7463-7477.	3.6	119
231	Conditions for Cognition. Studies in Cognitive Systems, 2000, , 1118-1132.	0.1	0
232	Recurrent Sampling Models for the Helmholtz Machine. Neural Computation, 1999, 11, 653-677.	2.2	13
233	The Effect of Correlated Variability on the Accuracy of a Population Code. Neural Computation, 1999, 11, 91-101.	2.2	729
234	Computational differences between asymmetrical and symmetrical networks. Network: Computation in Neural Systems, 1999, 10, 59-77.	3.6	28

#	Article	IF	CITATIONS
235	Computational differences between asymmetrical and symmetrical networks. Network: Computation in Neural Systems, 1999, 10, 59-77.	3.6	32
236	Probabilistic Interpretation of Population Codes. Neural Computation, 1998, 10, 403-430.	2.2	323
237	Recognition in Hierarchical Models. , 1997, , 43-62.		4
238	Exploration bonuses and dual control. Machine Learning, 1996, 25, 5-22.	5.4	77
239	Bee foraging in uncertain environments using predictive hebbian learning. Nature, 1995, 377, 725-728.	27.8	288
240	The Helmholtz Machine. Neural Computation, 1995, 7, 889-904.	2.2	990
241	Improving Generalization for Temporal Difference Learning: The Successor Representation. Neural Computation, 1993, 5, 613-624.	2.2	398
242	The Variance of Covariance Rules for Associative Matrix Memories and Reinforcement Learning. Neural Computation, 1993, 5, 205-209.	2.2	8
243	Q-learning. Machine Learning, 1992, 8, 279-292.	5.4	8,093
244	The convergence of TD(?) for general ?. Machine Learning, 1992, 8, 341-362.	5.4	176
245	The Convergence of TD(λ) for General λ. Machine Learning, 1992, 8, 341-362.	5.4	93
246	Technical Note: Q-Learning. Machine Learning, 1992, 8, 279-292.	5.4	2,549
247	Vaulting optimality. Behavioral and Brain Sciences, 1991, 14, 221-222.	0.7	0
248	Optimal Plasticity from Matrix Memories: What Goes Up Must Come Down. Neural Computation, 1990, 2, 85-93.	2.2	189
249	A computational process-tracing method for measuring people's planning strategies and how they change over time. Behavior Research Methods, 0, , .	4.0	4