Peter D Dayan

List of Publications by Year
in descending order

249	49,670	85	206
papers	citations	h-index	g-index

4658

1980

302	302	302	28127
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Q-learning. Machine Learning, 1992, 8, 279-292.	5.4	8,093
2	Technical Note: Q-Learning. Machine Learning, 1992, 8, 279-292.	5.4	2,549
3	Uncertainty-based competition between prefrontal and dorsolateral striatal systems for behavioral control. Nature Neuroscience, 2005, 8, 1704-1711.	14.8	2,108
4	Dissociable Roles of Ventral and Dorsal Striatum in Instrumental Conditioning. Science, 2004, 304, 452-454.	12.6	1,894
5	Cortical substrates for exploratory decisions in humans. Nature, 2006, 441, 876-879.	27.8	1,790
6	Uncertainty, Neuromodulation, and Attention. Neuron, 2005, 46, 681-692.	8.1	1,444
7	Model-Based Influences on Humans' Choices and Striatal Prediction Errors. Neuron, 2011, 69, 1204-1215.	8.1	1,388
8	Temporal Difference Models and Reward-Related Learning in the Human Brain. Neuron, 2003, 38, 329-337.	8.1	1,311
9	The Helmholtz Machine. Neural Computation, 1995, 7, 889-904.	2.2	990
10	Tonic dopamine: opportunity costs and the control of response vigor. Psychopharmacology, 2007, 191, 507-520.	3.1	969
11	States versus Rewards: Dissociable Neural Prediction Error Signals Underlying Model-Based and Model-Free Reinforcement Learning. Neuron, 2010, 66, 585-595.	8.1	935
12	Reinforcement learning: The Good, The Bad and The Ugly. Current Opinion in Neurobiology, 2008, 18, 185-196.	4.2	803
13	Goals and Habits in the Brain. Neuron, 2013, 80, 312-325.	8.1	799
14	Opponent interactions between serotonin and dopamine. Neural Networks, 2002, 15, 603-616.	5.9	744
15	Reward, Motivation, and Reinforcement Learning. Neuron, 2002, 36, 285-298.	8.1	743
16	The Effect of Correlated Variability on the Accuracy of a Population Code. Neural Computation, 1999, 11, 91-101.	2.2	729
17	Computational psychiatry. Trends in Cognitive Sciences, 2012, 16, 72-80.	7.8	645
18	Information processing with population codes. Nature Reviews Neuroscience, 2000, 1, 125-132.	10.2	610

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19	Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667.	27.8	557
20	Decision theory, reinforcement learning, and the brain. Cognitive, Affective and Behavioral Neuroscience, 2008, 8, 429-453.	2.0	427
21	Learning and selective attention. Nature Neuroscience, 2000, 3, 1218-1223.	14.8	424
22	INFERENCE ANDCOMPUTATION WITHPOPULATIONCODES. Annual Review of Neuroscience, 2003, 26, 381-410.	10.7	409
23	Improving Generalization for Temporal Difference Learning: The Successor Representation. Neural Computation, 1993, 5, 613-624.	2.2	398
24	Differential Encoding of Losses and Gains in the Human Striatum. Journal of Neuroscience, 2007, 27, 4826-4831.	3.6	396
25	Opponency Revisited: Competition and Cooperation Between Dopamine and Serotonin. Neuropsychopharmacology, 2011, 36, 74-97.	5.4	389
26	Dopamine: generalization and bonuses. Neural Networks, 2002, 15, 549-559.	5.9	388
27	Mapping anhedonia onto reinforcement learning: a behavioural meta-analysis. Biology of Mood & Anxiety Disorders, 2013, 3, 12.	4.7	353
28	Go and no-go learning in reward and punishment: Interactions between affect and effect. NeuroImage, 2012, 62, 154-166.	4.2	328
29	Probabilistic Interpretation of Population Codes. Neural Computation, 1998, 10, 403-430.	2.2	323
30	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
31	Space and time in visual context. Nature Reviews Neuroscience, 2007, 8, 522-535.	10.2	321
32	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
33	The misbehavior of value and the discipline of the will. Neural Networks, 2006, 19, 1153-1160.	5.9	310
34	Serotonin in Affective Control. Annual Review of Neuroscience, 2009, 32, 95-126.	10.7	301
35	Neural Prediction Errors Reveal a Risk-Sensitive Reinforcement-Learning Process in the Human Brain. Journal of Neuroscience, 2012, 32, 551-562.	3.6	293
36	Disentangling the Roles of Approach, Activation and Valence in Instrumental and Pavlovian Responding. PLoS Computational Biology, 2011, 7, e1002028.	3.2	292

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37	Bee foraging in uncertain environments using predictive hebbian learning. Nature, 1995, 377, 725-728.	27.8	288
38	A normative perspective on motivation. Trends in Cognitive Sciences, 2006, 10, 375-381.	7.8	268
39	Human Pavlovianâ€“Instrumental Transfer. Journal of Neuroscience, 2008, 28, 360-368.	3.6	264
40	Mapping value based planning and extensively trained choice in the human brain. Nature Neuroscience, 2012, 15, 786-791.	14.8	259
41	Model-based and model-free Pavlovian reward learning: Revaluation, revision, and revelation. Cognitive, Affective and Behavioral Neuroscience, 2014, 14, 473-492.	2.0	257
42	Phasic norepinephrine: A neural interrupt signal for unexpected events. Network: Computation in Neural Systems, 2006, 17, 335-350.	3.6	249
43	Dopamine restores reward prediction errors in old age. Nature Neuroscience, 2013, 16, 648-653.	14.8	233
44	A model of hippocampally dependent navigation, using the temporal difference learning rule. , 2000, 10, 1-16.		224
45	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
46	Action versus valence in decision making. Trends in Cognitive Sciences, 2014, 18, 194-202.	7.8	223
47	Serotonin Selectively Modulates Reward Value in Human Decision-Making. Journal of Neuroscience, 2012, 32, 5833-5842.	3.6	211
48	Action Dominates Valence in Anticipatory Representations in the Human Striatum and Dopaminergic Midbrain. Journal of Neuroscience, 2011, 31, 7867-7875.	3.6	202
49	Acetylcholine in cortical inference. Neural Networks, 2002, 15, 719-730.	5.9	200
50	Serotonin, Inhibition, and Negative Mood. PLoS Computational Biology, 2008, 4, e4.	3.2	200
51	Optimal Plasticity from Matrix Memories: What Goes Up Must Come Down. Neural Computation, 1990, 2, 85-93.	2.2	189
52	Dopamine Modulates Reward-Related Vigor. Neuropsychopharmacology, 2013, 38, 1495-1503.	5.4	187
53	How Humans Integrate the Prospects of Pain and Reward during Choice. Journal of Neuroscience, 2009, 29, 14617-14626.	3.6	184
54	The convergence of TD(?) for general ?. Machine Learning, 1992, 8, 341-362.	5.4	176

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55	Dopaminergic Modulation of Decision Making and Subjective Well-Being. Journal of Neuroscience, 2015, 35, 9811-9822.	3.6	174
56	Dopamine modulation in the basal ganglia locks the gate to working memory. Journal of Computational Neuroscience, 2006, 20, 153-166.	1.0	169
57	Off-line replay maintains declarative memories in a model of hippocampal-neocortical interactions. Nature Neuroscience, 2004, 7, 286-294.	14.8	163
58	Depression: A Decision-Theoretic Analysis. Annual Review of Neuroscience, 2015, 38, 1-23.	10.7	150
59	Association of Neural and Emotional Impacts of Reward Prediction Errors With Major Depression. JAMA Psychiatry, 2017, 74, 790.	11.0	150
60	Fast Sequences of Non-spatial State Representations in Humans. Neuron, 2016, 91, 194-204.	8.1	148
61	Twenty-Five Lessons from Computational Neuromodulation. Neuron, 2012, 76, 240-256.	8.1	145
62	Effort and Valuation in the Brain: The Effects of Anticipation and Execution. Journal of Neuroscience, 2013, 33, 6160-6169.	3.6	145
63	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
64	The algorithmic anatomy of model-based evaluation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130478.	4.0	144
65	Charting the landscape of priority problems in psychiatry, part 1: classification and diagnosis. Lancet Psychiatry,the, 2016, 3, 77-83.	7.4	143
66	Foraging for foundations in decision neuroscience: insights from ethology. Nature Reviews Neuroscience, 2018, 19, 419-427.	10.2	140
67	Space, Time, and Fear: Survival Computations along Defensive Circuits. Trends in Cognitive Sciences, 2020, 24, 228-241.	7.8	138
68	Dopamine and performance in a reinforcement learning task: evidence from Parkinsonâ€™s disease. Brain, 2012, 135, 1871-1883.	7.6	137
69	Adaptive integration of habits into depth-limited planning defines a habitual-goalâ€"directed spectrum. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12868-12873.	7.1	137
70	Flexible shaping: How learning in small steps helps. Cognition, 2009, 110, 380-394.	2.2	133
71	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
72	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

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73	Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making. Current Biology, 2015, 25, 1852-1859.	3.9	119
74	Computations Underlying Social Hierarchy Learning: Distinct Neural Mechanisms for Updating and Representing Self-Relevant Information. Neuron, 2016, 92, 1135-1147.	8.1	117
75	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
76	Bayesian modelling of Jumping-to-Conclusions bias in delusional patients. Cognitive Neuropsychiatry, 2011, 16, 422-447.	1.3	115
77	Dopamine, uncertainty and TD learning. Behavioral and Brain Functions, 2005, 1, 6.	3.3	113
78	A Bayesian formulation of behavioral control. Cognition, 2009, 113, 314-328.	2.2	113
79	Matching storage and recall: hippocampal spike timingâ€“dependent plasticity and phase response curves. Nature Neuroscience, 2005, 8, 1677-1683.	14.8	112
80	Acquisition and extinction in autoshaping.. Psychological Review, 2002, 109, 533-544.	3.8	110
81	Moral transgressions corrupt neural representations of value. Nature Neuroscience, 2017, 20, 879-885.	14.8	108
82	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
83	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
84	Nonpolitical Images Evoke Neural Predictors of Political Ideology. Current Biology, 2014, 24, 2693-2699.	3.9	100
85	Algorithms for survival: a comparative perspective on emotions. Nature Reviews Neuroscience, 2017, 18, 311-319.	10.2	99
86	Modeling Avoidance in Mood and Anxiety Disorders Using Reinforcement Learning. Biological Psychiatry, 2017, 82, 532-539.	1.3	96
87	Simple Plans or Sophisticated Habits? State, Transition and Learning Interactions in the Two-Step Task. PLoS Computational Biology, 2015, 11, e1004648.	3.2	94
88	The Convergence of TD(Î») for General Î». Machine Learning, 1992, 8, 341-362.	5.4	93
89	Dopamine, Learning, and Impulsivity: ABiological Account of Attention-Deficit/Hyperactivity Disorder. Journal of Child and Adolescent Psychopharmacology, 2005, 15, 160-179.	1.3	92
90	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

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91	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
92	Pharmacological Fingerprints of Contextual Uncertainty. PLoS Biology, 2016, 14, e1002575.	5.6	91
93	Cortical Surround Interactions and Perceptual Salience via Natural Scene Statistics. PLoS Computational Biology, 2012, 8, e1002405.	3.2	89
94	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
95	Altered learning under uncertainty in unmedicated mood and anxiety disorders. Nature Human Behaviour, 2019, 3, 1116-1123.	12.0	87
96	Risk Taking for Potential Reward Decreases across the Lifespan. Current Biology, 2016, 26, 1634-1639.	3.9	85
97	How to set the switches on this thing. Current Opinion in Neurobiology, 2012, 22, 1068-1074.	4.2	83
98	Formalizing Neurathâ€™s ship: Approximate algorithms for online causal learning.. Psychological Review, 2017, 124, 301-338.	3.8	81
99	A common mechanism for adaptive scaling of reward and novelty. Human Brain Mapping, 2010, 31, 1380-1394.	3.6	80
100	Perceptual organization in the tilt illusion. Journal of Vision, 2009, 9, 19-19.	0.3	78
101	Exploration bonuses and dual control. Machine Learning, 1996, 25, 5-22.	5.4	77
102	Vigor in the Face of Fluctuating Rates of Reward: An Experimental Examination. Journal of Cognitive Neuroscience, 2011, 23, 3933-3938.	2.3	77
103	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
104	Choice values. Nature Neuroscience, 2006, 9, 987-988.	14.8	76
105	Goal-directed control and its antipodes. Neural Networks, 2009, 22, 213-219.	5.9	76
106	An effect of serotonergic stimulation on learning rates for rewards apparent after long intertrial intervals. Nature Communications, 2018, 9, 2477.	12.8	75
107	A temporal difference account of avoidance learning. Network: Computation in Neural Systems, 2008, 19, 137-160.	3.6	73
108	The modulation of savouring by prediction error and its effects on choice. ELife, 2016, 5, .	6.0	72

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109	Doubly Distributional Population Codes: Simultaneous Representation of Uncertainty and Multiplicity. Neural Computation, 2003, 15, 2255-2279.	2.2	71
110	The Protective Action Encoding of Serotonin Transients in the Human Brain. Neuropsychopharmacology, 2018, 43, 1425-1435.	5.4	70
111	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
112	Dopamine, Reinforcement Learning, and Addiction. Pharmacopsychiatry, 2009, 42, S56-S65.	3.3	68
113	Simple substrates for complex cognition. Frontiers in Neuroscience, 2008, 2, 255-263.	2.8	67
114	Instrumental vigour in punishment and reward. European Journal of Neuroscience, 2012, 35, 1152-1168.	2.6	66
115	The Anterior Cingulate Cortex Predicts Future States to Mediate Model-Based Action Selection. Neuron, 2021, 109, 149-163.e7.	8.1	64
116	Uncertainty and Learning. IETE Journal of Research, 2003, 49, 171-181.	2.6	63
117	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
118	Computational Phenotyping of Two-Person Interactions Reveals Differential Neural Response to Depth-of-Thought. PLoS Computational Biology, 2012, 8, e1002841.	3.2	62
119	Synapses with short-term plasticity are optimal estimators of presynaptic membrane potentials. Nature Neuroscience, 2010, 13, 1271-1275.	14.8	61
120	Pupil-linked phasic arousal evoked by violation but not emergence of regularity within rapid sound sequences. Nature Communications, 2019, 10, 4030.	12.8	60
121	Forming global estimates of self-performance from local confidence. Nature Communications, 2019, 10, 1141.	12.8	59
122	Decision-Theoretic Psychiatry. Clinical Psychological Science, 2015, 3, 400-421.	4.0	58
123	Dopamine Increases a Value-Independent Gambling Propensity. Neuropsychopharmacology, 2016, 41, 2658-2667.	5.4	58
124	Temporal structure in associative retrieval. ELife, 2015, 4, .	6.0	56
125	Increased decision thresholds enhance information gathering performance in juvenile Obsessive-Compulsive Disorder (OCD). PLoS Computational Biology, 2017, 13, e1005440.	3.2	54
126	Fast Population Coding. Neural Computation, 2007, 19, 404-441.	2.2	51

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127	Decodability of Reward Learning Signals Predicts Mood Fluctuations. Current Biology, 2018, 28, 1433-1439.e7.	3.9	51
128	Dissociating neural learning signals in human sign- and goal-trackers. Nature Human Behaviour, 2020, 4, 201-214.	12.0	51
129	Impaired adaptation of learning to contingency volatility in internalizing psychopathology. ELife, 2020, 9, .	6.0	48
130	The value of whatâ€™s to come: Neural mechanisms coupling prediction error and the utility of anticipation. Science Advances, 2020, 6, eaba3828.	10.3	47
131	A Probabilistic Palimpsest Model of Visual Short-term Memory. PLoS Computational Biology, 2015, 11, e1004003.	3.2	46
132	Charting the landscape of priority problems in psychiatry, part 2: pathogenesis and aetiology. Lancet Psychiatry,the, 2016, 3, 84-90.	7.4	46
133	Bilinearity, rules, and prefrontal cortex. Frontiers in Computational Neuroscience, 2007, 1, 1.	2.1	44
134	Safety out of control: dopamine and defence. Behavioral and Brain Functions, 2016, 12, 15.	3.3	43
135	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
136	Tamping Ramping: Algorithmic, Implementational, and Computational Explanations of Phasic Dopamine Signals in the Accumbens. PLoS Computational Biology, 2015, 11, e1004622.	3.2	43
137	Freezing revisited: coordinated autonomic and central optimization of threat coping. Nature Reviews Neuroscience, 2022, 23, 568-580.	10.2	42
138	Increased decision thresholds trigger extended information gathering across the compulsivity spectrum. Translational Psychiatry, 2017, 7, 1296.	4.8	41
139	Nonlinear ideal observation and recurrent preprocessing in perceptual learning. Network: Computation in Neural Systems, 2003, 14, 233-247.	3.6	40
140	The roles of online and offline replay in planning. ELife, 2020, 9, .	6.0	40
141	When Money Is Not Enough: Awareness, Success, and Variability in Motor Learning. PLoS ONE, 2014, 9, e86580.	2.5	39
142	Change, stability, and instability in the Pavlovian guidance of behaviour from adolescence to young adulthood. PLoS Computational Biology, 2018, 14, e1006679.	3.2	39
143	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
144	Attenuation of dopamine-modulated prefrontal value signals underlies probabilistic reward learning deficits in old age. ELife, 2017, 6, .	6.0	37

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145	Selective Bayes: Attentional load and crowding. Vision Research, 2010, 50, 2248-2260.	1.4	36
146	Realizing the Clinical Potential of Computational Psychiatry: Report From the Banbury Center Meeting, February 2019. Biological Psychiatry, 2020, 88, e5-e10.	1.3	36
147	Values and Actions in Aversion. , 2009, , 175-191.		36
148	The influence of contextual reward statistics on risk preference. NeuroImage, 2016, 128, 74-84.	4.2	35
149	Pavlovian-Instrumental Interaction in â€˜Observing Behaviorâ€™. PLoS Computational Biology, 2010, 6, e1000903.	3.2	34
150	Serotonin's many meanings elude simple theories. ELife, 2015, 4, .	6.0	34
151	Monte Carlo Planning Method Estimates Planning Horizons during Interactive Social Exchange. PLoS Computational Biology, 2015, 11, e1004254.	3.2	33
152	Models that learn how humans learn: The case of decision-making and its disorders. PLoS Computational Biology, 2019, 15, e1006903.	3.2	33
153	Sparse Coding Can Predict Primary Visual Cortex Receptive Field Changes Induced by Abnormal Visual Input. PLoS Computational Biology, 2013, 9, e1003005.	3.2	32
154	Beta-Blocker Propranolol Modulates Decision Urgency During Sequential Information Gathering. Journal of Neuroscience, 2018, 38, 7170-7178.	3.6	32
155	Computational differences between asymmetrical and symmetrical networks. Network: Computation in Neural Systems, 1999, 10, 59-77.	3.6	32
156	A computational account of threat-related attentional bias. PLoS Computational Biology, 2019, 15, e1007341.	3.2	31
157	Sensory Conflict Disrupts Activity of the Drosophila Circadian Network. Cell Reports, 2016, 17, 1711-1718.	6.4	30
158	Soft Mixer Assignment in a Hierarchical Generative Model of Natural Scene Statistics. Neural Computation, 2006, 18, 2680-2718.	2.2	29
159	A model of risk and mental state shifts during social interaction. PLoS Computational Biology, 2018, 14, e1005935.	3.2	29
160	Computational differences between asymmetrical and symmetrical networks. Network: Computation in Neural Systems, 1999, 10, 59-77.	3.6	28
161	The Effect of Motivation on Movement: A Study of Bradykinesia in Parkinsonâ€™s Disease. PLoS ONE, 2012, 7, e47138.	2.5	28
162	Prefrontal Dynamics Associated with Efficient Detours and Shortcuts: A Combined Functional Magnetic Resonance Imaging and Magnetoencephalography Study. Journal of Cognitive Neuroscience, 2019, 31, 1227-1247.	2.3	28

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163	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
164	Parsing the Role of the Hippocampus in Approachâ€“Avoidance Conflict. Cerebral Cortex, 2017, 27, 201-215.	2.9	27
165	The social contingency of momentary subjective well-being. Nature Communications, 2016, 7, 11825.	12.8	27
166	Structure in the Space of Value Functions. Machine Learning, 2002, 49, 325-346.	5.4	26
167	The Dopaminergic Midbrain Mediates an Effect of Average Reward on Pavlovian Vigor. Journal of Cognitive Neuroscience, 2016, 28, 1303-1317.	2.3	26
168	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
169	Semi-rational models of conditioning:. , 2008, , 431-452.		26
170	Rationalizable Irrationalities of Choice. Topics in Cognitive Science, 2014, 6, 204-228.	1.9	24
171	Assessing animal affect: an automated and self-initiated judgement bias task based on natural investigative behaviour. Scientific Reports, 2018, 8, 12400.	3.3	24
172	Retrospective model-based inference guides model-free credit assignment. Nature Communications, 2019, 10, 750.	12.8	24
173	Nonlinear ideal observation and recurrent preprocessing in perceptual learning. Network: Computation in Neural Systems, 2003, 14, 233-247.	3.6	24
174	Prior preferences beneficially influence social and non-social learning. Nature Communications, 2017, 8, 817.	12.8	20
175	The Role of Value Systems in Decision Making. , 2008, , 51-70.		20
176	The limits of chemosensation vary across dimensions. Nature Communications, 2015, 6, 7468.	12.8	19
177	Magnetoencephalography decoding reveals structural differences within integrative decision processes. Nature Human Behaviour, 2018, 2, 670-681.	12.0	19
178	Neurofeedback through the lens of reinforcement learning. Trends in Neurosciences, 2022, 45, 579-593.	8.6	18
179	Matters temporal. Trends in Cognitive Sciences, 2002, 6, 105-106.	7.8	17
180	Optimal Recall from Bounded Metaplastic Synapses: Predicting Functional Adaptations in Hippocampal Area CA3. PLoS Computational Biology, 2014, 10, e1003489.	3.2	17

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181	Deep brain stimulation of the subthalamic nucleus modulates sensitivity to decision outcome value in Parkinsonâ€™s disease. Scientific Reports, 2016, 6, 32509.	3.3	17
182	Early childhood investment impacts social decision-making four decades later. Nature Communications, 2018, 9, 4705.	12.8	17
183	Backtracking during navigation is correlated with enhanced anterior cingulate activity and suppression of alpha oscillations and the â€˜default-modeâ€™ network. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191016.	2.6	17
184	Combined model-free and model-sensitive reinforcement learning in non-human primates. PLoS Computational Biology, 2020, 16, e1007944.	3.2	17
185	Interrupting behaviour: Minimizing decision costs via temporal commitment and low-level interrupts. PLoS Computational Biology, 2018, 14, e1005916.	3.2	17
186	A computational model of aesthetic value.. Psychological Review, 2022, 129, 1319-1337.	3.8	17
187	Optimal indolence: a normative microscopic approach to work and leisure. Journal of the Royal Society Interface, 2014, 11, 20130969.	3.4	16
188	The Neural Basis of Aversive Pavlovian Guidance during Planning. Journal of Neuroscience, 2017, 37, 10215-10229.	3.6	15
189	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
190	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
191	Humans use forward thinking to exploit social controllability. ELife, 2021, 10, .	6.0	14
192	Recurrent Sampling Models for the Helmholtz Machine. Neural Computation, 1999, 11, 653-677.	2.2	13
193	Light Dominates Peripheral Circadian Oscillations in Drosophila melanogaster During Sensory Conflict. Journal of Biological Rhythms, 2017, 32, 423-432.	2.6	13
194	Control over patch encounters changes foraging behavior. IScience, 2021, 24, 103005.	4.1	12
195	Multiple value signals in dopaminergic midbrain and their role in avoidance contexts. NeuroImage, 2016, 135, 197-203.	4.2	11
196	Learning Contextual Reward Expectations for Value Adaptation. Journal of Cognitive Neuroscience, 2018, 30, 50-69.	2.3	11
197	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
198	An unsupervised learning model of neural plasticity: Orientation selectivity in goggle-reared kittens. Vision Research, 2007, 47, 2868-2877.	1.4	10

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199	Some Work and Some Play: Microscopic and Macroscopic Approaches to Labor and Leisure. PLoS Computational Biology, 2014, 10, e1003894.	3.2	10
200	Control of neurite growth and guidance by an inhibitory cell-body signal. PLoS Computational Biology, 2018, 14, e1006218.	3.2	10
201	Reward and punisher experience alter rodent decision-making in a judgement bias task. Scientific Reports, 2020, 10, 11839.	3.3	10
202	Neural encoding of perceived patch value during competitive and hazardous virtual foraging. Nature Communications, 2021, 12, 5478.	12.8	10
203	Exploration from Generalization Mediated by Multiple Controllers. , 2013, , 73-91.		10
204	Liking. Current Biology, 2021, 31, R1555-R1557.	3.9	10
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