Peter D Dayan

List of Publications by Year in Descending Order

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189

g-index

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

259 36,024 80 papers citations h-index

302 44,041 8.4 7.71 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
259	"Liking" as an early and editable draft of long-run affective value <i>PLoS Biology</i> , 2022 , 20, e3001476	9.7	1
258	Optimism and pessimism in optimised replay <i>PLoS Computational Biology</i> , 2022 , 18, e1009634	5	1
257	Peril, prudence and planning as risk, avoidance and worry. <i>Journal of Mathematical Psychology</i> , 2022 , 106, 102617	1.2	O
256	Spatial preferences account for inter-animal variability during the continual learning of a dynamic cognitive task <i>Cell Reports</i> , 2022 , 39, 110708	10.6	О
255	Neurofeedback through the lens of reinforcement learning Trends in Neurosciences, 2022,	13.3	1
254	When unsupervised training benefits category learning Cognition, 2021, 221, 104984	3.5	0
253	A comparison of 'pruning' during multi-step planning in depressed and healthy individuals. <i>Psychological Medicine</i> , 2021 , 1-9	6.9	O
252	Efficiency and prioritization of inference-based credit assignment. Current Biology, 2021, 31, 2747-2756	. € 63	2
251	Internality and the internalisation of failure: Evidence from a novel task. <i>PLoS Computational Biology</i> , 2021 , 17, e1009134	5	
250	The Anterior Cingulate Cortex Predicts Future States to Mediate Model-Based Action Selection. <i>Neuron</i> , 2021 , 109, 149-163.e7	13.9	17
249	When will's wont wants wanting. <i>Behavioral and Brain Sciences</i> , 2021 , 44, e35	0.9	1
248	Human subjects exploit a cognitive map for credit assignment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	5
247	Dissecting the links between reward and loss, decision-making, and self-reported affect using a computational approach. <i>PLoS Computational Biology</i> , 2021 , 17, e1008555	5	4
246	Using Primary Reinforcement to Enhance Translatability of a Human Affect and Decision-Making Judgment Bias Task. <i>Journal of Cognitive Neuroscience</i> , 2021 , 33, 2523-2535	3.1	1
245	Control over patch encounters changes foraging behavior. <i>IScience</i> , 2021 , 24, 103005	6.1	2
244	Neural encoding of perceived patch value during competitive and hazardous virtual foraging. <i>Nature Communications</i> , 2021 , 12, 5478	17.4	1
243	Dopamine enhances model-free credit assignment through boosting of retrospective model-based inference. <i>ELife</i> , 2021 , 10,	8.9	1

(2020-2021)

242	Liking <i>Current Biology</i> , 2021 , 31, R1555-R1557	6.3	0
241	Computational Psychiatry for Computers. <i>IScience</i> , 2020 , 23, 101772	6.1	4
240	Adversarial vulnerabilities of human decision-making. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 29221-29228	11.5	3
239	Combined model-free and model-sensitive reinforcement learning in non-human primates. <i>PLoS Computational Biology</i> , 2020 , 16, e1007944	5	5
238	The value of what's to come: Neural mechanisms coupling prediction error and the utility of anticipation. <i>Science Advances</i> , 2020 , 6, eaba3828	14.3	20
237	Realizing the Clinical Potential of Computational Psychiatry: Report From the Banbury Center Meeting, February 2019. <i>Biological Psychiatry</i> , 2020 , 88, e5-e10	7.9	19
236	Uncertainty in learning, choice, and visual fixation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 3291-3300	11.5	8
235	Space, Time, and Fear: Survival Computations along Defensive Circuits. <i>Trends in Cognitive Sciences</i> , 2020 , 24, 228-241	14	45
234	The roles of online and offline replay in planning. <i>ELife</i> , 2020 , 9,	8.9	22
233	Impaired adaptation of learning to contingency volatility in internalizing psychopathology. <i>ELife</i> , 2020 , 9,	8.9	8
232	Representation, abstraction, and simple-minded sophisticates. <i>Behavioral and Brain Sciences</i> , 2020 , 43, e126	0.9	
231	Dissociating neural learning signals in human sign- and goal-trackers. <i>Nature Human Behaviour</i> , 2020 , 4, 201-214	12.8	22
230	Short-Term Fasting Selectively Influences Impulsivity in Healthy Individuals. <i>Frontiers in Psychology</i> , 2020 , 11, 1644	3.4	2
229	Reward and punisher experience alter rodent decision-making in a judgement bias task. <i>Scientific Reports</i> , 2020 , 10, 11839	4.9	6
228	Memory Alone Does Not Account for the Way Rats Learn a Simple Spatial Alternation Task. <i>Journal of Neuroscience</i> , 2020 , 40, 7311-7317	6.6	3
227	Combined model-free and model-sensitive reinforcement learning in non-human primates 2020 , 16, e1007944		
226	Combined model-free and model-sensitive reinforcement learning in non-human primates 2020 , 16, e1007944		
225	Combined model-free and model-sensitive reinforcement learning in non-human primates 2020 , 16, e1007944		

224 16, e1007944 Pupil-linked phasic arousal evoked by violation but not emergence of regularity within rapid sound 223 27 17.4 sequences. Nature Communications, 2019, 10, 4030 Altered learning under uncertainty in unmedicated mood and anxiety disorders. Nature Human 222 12.8 34 Behaviour, 2019, 3, 1116-1123 Models that learn how humans learn: The case of decision-making and its disorders. PLoS 221 12 Computational Biology, 2019, 15, e1006903 Prefrontal Dynamics Associated with Efficient Detours and Shortcuts: A Combined Functional Magnetic Resonance Imaging and Magnetoencenphalography Study. Journal of Cognitive 220 3.1 13 Neuroscience, 2019, 31, 1227-1247 Forming global estimates of self-performance from local confidence. Nature Communications, 2019, 219 17.4 26 10, 1141 Retrospective model-based inference guides model-free credit assignment. Nature Communications 218 17 17.4 , **2019**, 10, 750 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 217 11 B: Biological Sciences, 2019, 286, 20191016 Learning to use past evidence in a sophisticated world model. PLoS Computational Biology, 2019, 216 5 1 15, e1007093 A computational account of threat-related attentional bias. PLoS Computational Biology, 2019, 15, e1007341 215 How do people learn how to plan? 2019, 214 2 Pavlovian-instrumental interactions in active avoidance: The bark of neutral trials. Brain Research, 213 3.7 2019, 1713, 52-61 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 59 212 Models and Methods for Reinforcement Learning 2018, 1-40 211 1 The Protective Action Encoding of Serotonin Transients in the Human Brain. 8.7 210 40 Neuropsychopharmacology, 2018, 43, 1425-1435 Learning Contextual Reward Expectations for Value Adaptation. Journal of Cognitive Neuroscience, 209 3.1 5 **2018**, 30, 50-69 Beta-Blocker Propranolol Modulates Decision Urgency During Sequential Information Gathering. 208 6.6 18 Journal of Neuroscience, 2018, 38, 7170-7178 Decodability of Reward Learning Signals Predicts Mood Fluctuations. Current Biology, 2018, 28, 1433-14393e7 27 207

Combined model-free and model-sensitive reinforcement learning in non-human primates 2020,

(2017-2018)

206	Foraging for foundations in decision neuroscience: insights from ethology. <i>Nature Reviews Neuroscience</i> , 2018 , 19, 419-427	13.5	75	
205	Interrupting behaviour: Minimizing decision costs via temporal commitment and low-level interrupts. <i>PLoS Computational Biology</i> , 2018 , 14, e1005916	5	8	
204	A model of risk and mental state shifts during social interaction. <i>PLoS Computational Biology</i> , 2018 , 14, e1005935	5	19	
203	Forget-me-some: General versus special purpose models in a hierarchical probabilistic task. <i>PLoS ONE</i> , 2018 , 13, e0205974	3.7	4	
202	Early childhood investment impacts social decision-making four decades later. <i>Nature Communications</i> , 2018 , 9, 4705	17.4	12	
201	Change, stability, and instability in the Pavlovian guidance of behaviour from adolescence to young adulthood. <i>PLoS Computational Biology</i> , 2018 , 14, e1006679	5	20	
200	Assessing animal affect: an automated and self-initiated judgement bias task based on natural investigative behaviour. <i>Scientific Reports</i> , 2018 , 8, 12400	4.9	14	
199	Magnetoencephalography decoding reveals structural differences within integrative decision processes. <i>Nature Human Behaviour</i> , 2018 , 2, 670-681	12.8	15	
198	Control of neurite growth and guidance by an inhibitory cell-body signal. <i>PLoS Computational Biology</i> , 2018 , 14, e1006218	5	6	
197	An effect of serotonergic stimulation on learning rates for rewards apparent after long intertrial intervals. <i>Nature Communications</i> , 2018 , 9, 2477	17.4	46	
196	When planning to survive goes wrong: predicting the future and replaying the past in anxiety and PTSD. <i>Current Opinion in Behavioral Sciences</i> , 2018 , 24, 89-95	4	20	
195	Modeling Avoidance in Mood and Anxiety Disorders Using Reinforcement Learning. <i>Biological Psychiatry</i> , 2017 , 82, 532-539	7.9	59	
194	Moral transgressions corrupt neural representations of value. <i>Nature Neuroscience</i> , 2017 , 20, 879-885	25.5	68	
193	Algorithms for survival: a comparative perspective on emotions. <i>Nature Reviews Neuroscience</i> , 2017 , 18, 311-319	13.5	66	
192	Prior preferences beneficially influence social and non-social learning. <i>Nature Communications</i> , 2017 , 8, 817	17.4	11	
191	Increased decision thresholds enhance information gathering performance in juvenile Obsessive-Compulsive Disorder (OCD). <i>PLoS Computational Biology</i> , 2017 , 13, e1005440	5	37	
190	Light Dominates Peripheral Circadian Oscillations in Drosophila melanogaster During Sensory Conflict. <i>Journal of Biological Rhythms</i> , 2017 , 32, 423-432	3.2	9	
189	The Neural Basis of Aversive Pavlovian Guidance during Planning. <i>Journal of Neuroscience</i> , 2017 , 37, 10	2165610	229	

188	Pavlovian influences on learning differ between rats and mice in a counter-balanced Go/NoGo judgement bias task. <i>Behavioural Brain Research</i> , 2017 , 331, 214-224	3.4	21
187	Association of Neural and Emotional Impacts of Reward Prediction Errors With Major Depression. <i>JAMA Psychiatry</i> , 2017 , 74, 790-797	14.5	93
186	Formalizing Neurath's ship: Approximate algorithms for online causal learning. <i>Psychological Review</i> , 2017 , 124, 301-338	6.3	46
185	Increased decision thresholds trigger extended information gathering across the compulsivity spectrum. <i>Translational Psychiatry</i> , 2017 , 7, 1296	8.6	29
184	Neurobiological Modeling 2017 , 526-541		
183	Attenuation of dopamine-modulated prefrontal value signals underlies probabilistic reward learning deficits in old age. <i>ELife</i> , 2017 , 6,	8.9	24
182	Parsing the Role of the Hippocampus in Approach-Avoidance Conflict. <i>Cerebral Cortex</i> , 2017 , 27, 201-21	55.1	19
181	Peripheral Serotonin 1B Receptor Transcription Predicts the Effect of Acute Tryptophan Depletion on Risky Decision-Making. <i>International Journal of Neuropsychopharmacology</i> , 2017 , 20, 58-66	5.8	4
180	Sensory Conflict Disrupts Activity of the Drosophila Circadian Network. <i>Cell Reports</i> , 2016 , 17, 1711-171	& 0.6	20
179	The social contingency of momentary subjective well-being. <i>Nature Communications</i> , 2016 , 7, 11825	17.4	15
178	Adaptive integration of habits into depth-limited planning defines a habitual-goal-directed spectrum. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 12868-12873	11.5	96
177	Deep brain stimulation of the subthalamic nucleus modulates sensitivity to decision outcome value in Parkinson's disease. <i>Scientific Reports</i> , 2016 , 6, 32509	4.9	12
176	Safety out of control: dopamine and defence. Behavioral and Brain Functions, 2016, 12, 15	4.1	29
175	Risk Taking for Potential Reward Decreases across the Lifespan. <i>Current Biology</i> , 2016 , 26, 1634-1639	6.3	57
174	Charting the landscape of priority problems in psychiatry, part 2: pathogenesis and aetiology. Lancet Psychiatry, the, 2016 , 3, 84-90	23.3	37
173	Charting the landscape of priority problems in psychiatry, part 1: classification and diagnosis. <i>Lancet Psychiatry,the</i> , 2016 , 3, 77-83	23.3	107
172	Pharmacological Fingerprints of Contextual Uncertainty. <i>PLoS Biology</i> , 2016 , 14, e1002575	9.7	55
171	A mathematical model explains saturating axon guidance responses to molecular gradients. <i>ELife</i> , 2016 , 5, e12248	8.9	370

170	The modulation of savouring by prediction error and its effects on choice. <i>ELife</i> , 2016 , 5,	8.9	40
169	How People Use Social Information to Find out What to Want in the Paradigmatic Case of Inter-temporal Preferences. <i>PLoS Computational Biology</i> , 2016 , 12, e1004965	5	26
168	Cognitive Bias in Ambiguity Judgements: Using Computational Models to Dissect the Effects of Mild Mood Manipulation in Humans. <i>PLoS ONE</i> , 2016 , 11, e0165840	3.7	17
167	Computations Underlying Social Hierarchy Learning: Distinct Neural Mechanisms for Updating and Representing Self-Relevant Information. <i>Neuron</i> , 2016 , 92, 1135-1147	13.9	68
166	Multiple value signals in dopaminergic midbrain and their role in avoidance contexts. <i>NeuroImage</i> , 2016 , 135, 197-203	7.9	8
165	The influence of contextual reward statistics on risk preference. <i>NeuroImage</i> , 2016 , 128, 74-84	7.9	25
164	The Dopaminergic Midbrain Mediates an Effect of Average Reward on Pavlovian Vigor. <i>Journal of Cognitive Neuroscience</i> , 2016 , 28, 1303-17	3.1	20
163	Dopamine Increases a Value-Independent Gambling Propensity. <i>Neuropsychopharmacology</i> , 2016 , 41, 2658-67	8.7	43
162	Striatal structure and function predict individual biases in learning to avoid pain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 4812-7	11.5	45
161	Fast Sequences of Non-spatial State Representations in Humans. <i>Neuron</i> , 2016 , 91, 194-204	13.9	83
161 160	Fast Sequences of Non-spatial State Representations in Humans. <i>Neuron</i> , 2016 , 91, 194-204 Depression: a decision-theoretic analysis. <i>Annual Review of Neuroscience</i> , 2015 , 38, 1-23	13.9	102
160	Depression: a decision-theoretic analysis. <i>Annual Review of Neuroscience</i> , 2015 , 38, 1-23 Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making.	17	102
160	Depression: a decision-theoretic analysis. <i>Annual Review of Neuroscience</i> , 2015 , 38, 1-23 Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making. <i>Current Biology</i> , 2015 , 25, 1852-9 A probabilistic palimpsest model of visual short-term memory. <i>PLoS Computational Biology</i> , 2015 ,	6.3	102
160 159 158	Depression: a decision-theoretic analysis. <i>Annual Review of Neuroscience</i> , 2015 , 38, 1-23 Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making. <i>Current Biology</i> , 2015 , 25, 1852-9 A probabilistic palimpsest model of visual short-term memory. <i>PLoS Computational Biology</i> , 2015 , 11, e1004003 Anticipation and choice heuristics in the dynamic consumption of pain relief. <i>PLoS Computational</i>	17 6.3 5	102 92 31
160 159 158	Depression: a decision-theoretic analysis. <i>Annual Review of Neuroscience</i> , 2015 , 38, 1-23 Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making. <i>Current Biology</i> , 2015 , 25, 1852-9 A probabilistic palimpsest model of visual short-term memory. <i>PLoS Computational Biology</i> , 2015 , 11, e1004003 Anticipation and choice heuristics in the dynamic consumption of pain relief. <i>PLoS Computational Biology</i> , 2015 , 11, e1004030	176.355	102 92 31
160 159 158 157	Depression: a decision-theoretic analysis. <i>Annual Review of Neuroscience</i> , 2015 , 38, 1-23 Dissociable Effects of Serotonin and Dopamine on the Valuation of Harm in Moral Decision Making. <i>Current Biology</i> , 2015 , 25, 1852-9 A probabilistic palimpsest model of visual short-term memory. <i>PLoS Computational Biology</i> , 2015 , 11, e1004003 Anticipation and choice heuristics in the dynamic consumption of pain relief. <i>PLoS Computational Biology</i> , 2015 , 11, e1004030 The limits of chemosensation vary across dimensions. <i>Nature Communications</i> , 2015 , 6, 7468 Interplay of approximate planning strategies. <i>Proceedings of the National Academy of Sciences of</i>	17 6.3 5 17.4 11.5	102 92 31 3

152	Taming the shrewdness of neural function: methodological challenges in computational psychiatry. <i>Current Opinion in Behavioral Sciences</i> , 2015 , 5, 128-132	4	6
151	Dopaminergic Modulation of Decision Making and Subjective Well-Being. <i>Journal of Neuroscience</i> , 2015 , 35, 9811-22	6.6	113
150	Monte Carlo Planning Method Estimates Planning Horizons during Interactive Social Exchange. <i>PLoS Computational Biology</i> , 2015 , 11, e1004254	5	21
149	Simple Plans or Sophisticated Habits? State, Transition and Learning Interactions in the Two-Step Task. <i>PLoS Computational Biology</i> , 2015 , 11, e1004648	5	61
148	The three R's of trust. Current Opinion in Behavioral Sciences, 2015, 3, 102-106	4	8
147	Tamping Ramping: Algorithmic, Implementational, and Computational Explanations of Phasic Dopamine Signals in the Accumbens. <i>PLoS Computational Biology</i> , 2015 , 11, e1004622	5	30
146	Temporal structure in associative retrieval. <i>ELife</i> , 2015 , 4,	8.9	43
145	Serotonin's many meanings elude simple theories. <i>ELife</i> , 2015 , 4,	8.9	25
144	Differential, but not opponent, effects of L -DOPA and citalopram on action learning with reward and punishment. <i>Psychopharmacology</i> , 2014 , 231, 955-66	4.7	63
143	The algorithmic anatomy of model-based evaluation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014 , 369,	5.8	103
142	Rationalizable irrationalities of choice. <i>Topics in Cognitive Science</i> , 2014 , 6, 204-28	2.5	20
141	A computational and neural model of momentary subjective well-being. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 12252-7	11.5	204
140	The influence of receptor positioning on chemotactic information. <i>Journal of Theoretical Biology</i> , 2014 , 360, 95-101	2.3	6
139	Model-based and model-free Pavlovian reward learning: revaluation, revision, and revelation. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2014 , 14, 473-92	3.5	203
138	Action versus valence in decision making. <i>Trends in Cognitive Sciences</i> , 2014 , 18, 194-202	14	160
137	When money is not enough: awareness, success, and variability in motor learning. <i>PLoS ONE</i> , 2014 , 9, e86580	3.7	28
136	Some work and some play: microscopic and macroscopic approaches to labor and leisure. <i>PLoS Computational Biology</i> , 2014 , 10, e1003894	5	8
135	Nonpolitical images evoke neural predictors of political ideology. <i>Current Biology</i> , 2014 , 24, 2693-9	6.3	73

(2012-2014)

134	Optimal recall from bounded metaplastic synapses: predicting functional adaptations in hippocampal area CA3. <i>PLoS Computational Biology</i> , 2014 , 10, e1003489	5	13
133	The habenula encodes negative motivational value associated with primary punishment in humans. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 11858-63	11.5	93
132	Harm to others outweighs harm to self in moral decision making. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17320-5	11.5	161
131	Optimal indolence: a normative microscopic approach to work and leisure. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20130969	4.1	13
130	Mapping anhedonia onto reinforcement learning: a behavioural meta-analysis. <i>Biology of Mood & Anxiety Disorders</i> , 2013 , 3, 12		243
129	Dopamine modulates reward-related vigor. <i>Neuropsychopharmacology</i> , 2013 , 38, 1495-503	8.7	143
128	Goals and habits in the brain. Neuron, 2013, 80, 312-25	13.9	577
127	Dopamine restores reward prediction errors in old age. <i>Nature Neuroscience</i> , 2013 , 16, 648-53	25.5	173
126	Effort and valuation in the brain: the effects of anticipation and execution. <i>Journal of Neuroscience</i> , 2013 , 33, 6160-9	6.6	120
125	Sparse coding can predict primary visual cortex receptive field changes induced by abnormal visual input. <i>PLoS Computational Biology</i> , 2013 , 9, e1003005	5	25
124	Exploration from Generalization Mediated by Multiple Controllers 2013, 73-91		6
123	Instrumental vigour in punishment and reward. European Journal of Neuroscience, 2012, 35, 1152-68	3.5	51
122	How to set the switches on this thing. Current Opinion in Neurobiology, 2012, 22, 1068-74	7.6	65
121	Computational psychiatry. <i>Trends in Cognitive Sciences</i> , 2012 , 16, 72-80	14	470
120	Mapping value based planning and extensively trained choice in the human brain. <i>Nature Neuroscience</i> , 2012 , 15, 786-91	25.5	214
119	A step-by-step guide to dopamine. <i>Biological Psychiatry</i> , 2012 , 71, 842-3	7.9	2
118	Go and no-go learning in reward and punishment: interactions between affect and effect. <i>Neurolmage</i> , 2012 , 62, 154-66	7.9	237
117	Twenty-five lessons from computational neuromodulation. <i>Neuron</i> , 2012 , 76, 240-56	13.9	109

116	The effect of motivation on movement: a study of bradykinesia in Parkinson's disease. <i>PLoS ONE</i> , 2012 , 7, e47138	3.7	23
115	Models of Value and Choice 2012 , 33-52		6
114	Cortical Surround Interactions and Perceptual Salience via Natural Scene Statistics. <i>PLoS Computational Biology</i> , 2012 , 8, e1002405	5	60
113	Bonsai trees in your head: how the pavlovian system sculpts goal-directed choices by pruning decision trees. <i>PLoS Computational Biology</i> , 2012 , 8, e1002410	5	217
112	Computational phenotyping of two-person interactions reveals differential neural response to depth-of-thought. <i>PLoS Computational Biology</i> , 2012 , 8, e1002841	5	49
111	Serotonin selectively modulates reward value in human decision-making. <i>Journal of Neuroscience</i> , 2012 , 32, 5833-42	6.6	161
110	Dopamine and performance in a reinforcement learning task: evidence from Parkinson's disease. <i>Brain</i> , 2012 , 135, 1871-83	11.2	115
109	Neural prediction errors reveal a risk-sensitive reinforcement-learning process in the human brain. <i>Journal of Neuroscience</i> , 2012 , 32, 551-62	6.6	191
108	Action controls dopaminergic enhancement of reward representations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 7511-6	11.5	86
107	Opponency revisited: competition and cooperation between dopamine and serotonin. <i>Neuropsychopharmacology</i> , 2011 , 36, 74-97	8.7	318
106	Model-based influences on humans' choices and striatal prediction errors. <i>Neuron</i> , 2011 , 69, 1204-15	13.9	1004
105	Optimal decisions for contrast discrimination. <i>Journal of Vision</i> , 2011 , 11,	0.4	3
104	Action dominates valence in anticipatory representations in the human striatum and dopaminergic midbrain. <i>Journal of Neuroscience</i> , 2011 , 31, 7867-75	6.6	171
103	Bayesian modelling of Jumping-to-Conclusions bias in delusional patients. <i>Cognitive Neuropsychiatry</i> , 2011 , 16, 422-47	2	80
102	Disentangling the roles of approach, activation and valence in instrumental and pavlovian responding. <i>PLoS Computational Biology</i> , 2011 , 7, e1002028	5	214
101	Vigor in the face of fluctuating rates of reward: an experimental examination. <i>Journal of Cognitive Neuroscience</i> , 2011 , 23, 3933-8	3.1	63
100	Synapses with short-term plasticity are optimal estimators of presynaptic membrane potentials. <i>Nature Neuroscience</i> , 2010 , 13, 1271-5	25.5	52
99	Pavlovian-instrumental interaction in 'observing behavior'. <i>PLoS Computational Biology</i> , 2010 , 6, e1000	903	24

(2008-2010)

98	States versus rewards: dissociable neural prediction error signals underlying model-based and model-free reinforcement learning. <i>Neuron</i> , 2010 , 66, 585-95	13.9	725
97	Selective Bayes: attentional load and crowding. Vision Research, 2010, 50, 2248-60	2.1	27
96	A common mechanism for adaptive scaling of reward and novelty. Human Brain Mapping, 2010 , 31, 138	0 -9 9	63
95	Bayesian model predicts the response of axons to molecular gradients. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 10296-301	11.5	116
94	The role of background statistics in face adaptation. <i>Journal of Neuroscience</i> , 2009 , 29, 12035-44	6.6	5
93	How humans integrate the prospects of pain and reward during choice. <i>Journal of Neuroscience</i> , 2009 , 29, 14617-26	6.6	147
92	Prospective and retrospective temporal difference learning. <i>Network: Computation in Neural Systems</i> , 2009 , 20, 32-46	0.7	8
91	Dopamine, reinforcement learning, and addiction. <i>Pharmacopsychiatry</i> , 2009 , 42 Suppl 1, S56-65	2	50
90	A Bayesian formulation of behavioral control. <i>Cognition</i> , 2009 , 113, 314-328	3.5	93
89	Goal-directed control and its antipodes. <i>Neural Networks</i> , 2009 , 22, 213-9	9.1	58
88	Perceptual organization in the tilt illusion. <i>Journal of Vision</i> , 2009 , 9, 19.1-20	0.4	55
87	Serotonin in affective control. <i>Annual Review of Neuroscience</i> , 2009 , 32, 95-126	17	245
86	Flexible shaping: how learning in small steps helps. <i>Cognition</i> , 2009 , 110, 380-94	3.5	74
85	Dynamics of attentional selection under conflict: toward a rational Bayesian account. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 2009 , 35, 700-17	2.6	73
84	Values and Actions in Aversion 2009 , 175-191		22
83	Reinforcement learning: the good, the bad and the ugly. Current Opinion in Neurobiology, 2008, 18, 185	-9,6 6	592
82	A temporal difference account of avoidance learning. <i>Network: Computation in Neural Systems</i> , 2008 , 19, 137-60	0.7	59
81	Adaptation across the cortical hierarchy: low-level curve adaptation affects high-level facial-expression judgments. <i>Journal of Neuroscience</i> , 2008 , 28, 3374-83	6.6	86

80	Serotonin, inhibition, and negative mood. PLoS Computational Biology, 2008, 4, e4	5	166
79	Human pavlovian-instrumental transfer. <i>Journal of Neuroscience</i> , 2008 , 28, 360-8	6.6	225
78	Simple substrates for complex cognition. <i>Frontiers in Neuroscience</i> , 2008 , 2, 255-63	5.1	53
77	Decision theory, reinforcement learning, and the brain. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2008 , 8, 429-53	3.5	325
76	The Role of Value Systems in Decision Making 2008 , 51-70		18
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12	Computational differences between asymmetrical and symmetrical networks		22
11	Nonlinear ideal observation and recurrent preprocessing in perceptual learning		22
10	Anterior cingulate cortex represents action-state predictions and causally mediates model-based reinforcement learning in a two-step decision task		9
9	Noradrenaline modulates decision urgency during sequential information gathering		2

8	Integrated accounts of behavioral and neuroimaging data using flexible recurrent neural network models	4
7	The value of what to come: neural mechanisms coupling prediction error and reward anticipation	4
6	Disentangled behavioral representations	4
5	Simple Plans or Sophisticated Habits? State, Transition and Learning Interactions in the Two-step Task.	2
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3	Optimism and pessimism in optimised replay	2
2	Peril, Prudence and Planning as Risk, Avoidance and Worry	2
1	Reinforcement Learning	5