Ben Seymour

List of Publications by Year
in descending order

92 papers	20,180 citations	38742 50 h-index	51608 86 g-index
133 all docs	133 docs citations	133 times ranked	15505 citing authors

#	Article	IF	Citations
1	BCI training to move a virtual hand reduces phantom limb pain. Neurology, 2020, 95, e417-e426.	1.1	16
2	Hierarchical models of pain: Inference, information-seeking, and adaptive control.. NeuroImage, 2020, 222, 117212.	4.2	27
3	Pain Control by Co-adaptive Learning in a Brain-Machine Interface. Current Biology, 2020, 30, 3935-3944.e7.	3.9	28
4	Resting-state Amplitude of Low-frequency Fluctuation is a Potentially Useful Prognostic Functional Biomarker in Cervical Myelopathy. Clinical Orthopaedics and Related Research, 2020, 478, 1667-1680.	1.5	23
5	An Evolutionarily Threat-Relevant Odor Strengthens Human Fear Memory. Frontiers in Neuroscience, 2020, 14, 255.	2.8	5
6	Pain: A Precision Signal for Reinforcement Learning and Control. Neuron, 2019, 101, 1029-1041.	8.1	79
7	Decision-making in brains and robots â€" the case for an interdisciplinary approach. Current Opinion in Behavioral Sciences, 2019, 26, 137-145.	3.9	8
8	Toward high-performance, memory-efficient, and fast reinforcement learningâ€"Lessons from decision neuroscience. Science Robotics, 2019, 4, .	17.6	8
9	Classification and characterisation of brain network changes in chronic back pain: A multicenter study. Wellcome Open Research, 2018, 3, 19.	1.8	58
10	Classification and characterisation of brain network changes in chronic back pain: A multicenter study. Wellcome Open Research, 2018, 3, 19.	1.8	28
11	The control of tonic pain by active relief learning. ELife, 2018, 7, .	6.0	21
12	Anterior cingulate cortex connectivity is associated with suppression of behaviour in a rat model of chronic pain. Brain and Neuroscience Advances, 2018, 2, 239821281877964.	3.4	9
13	MEGâ€"BMI to Control Phantom Limb Pain. Neurologia Medico-Chirurgica, 2018, 58, 327-333.	2.2	8
14	Model-based and model-free pain avoidance learning. Brain and Neuroscience Advances, 2018, 2, 239821281877296.	3.4	19
15	Response heterogeneity: Challenges for personalised medicine and big data approaches in psychiatry and chronic pain. F1000Research, 2018, 7, 55.	1.6	3
16	Value generalization in human avoidance learning. ELife, 2018, 7, .	6.0	34
17	A prediction model of working memory across health and psychiatric disease using whole-brain functional connectivity. ELife, 2018, 7, .	6.0	73
18	Disrupted habenula function in major depression. Molecular Psychiatry, 2017, 22, 202-208.	7.9	147

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19	Thermosensory Perceptual Learning Is Associated with Structural Brain Changes in Parietalâ€“Opercular (SII) Cortex. Journal of Neuroscience, 2017, 37, 9380-9388.	3.6	14
20	Fear reduction without fear through reinforcement of neural activity that bypasses conscious exposure. Nature Human Behaviour, 2017, 1, .	12.0	113
21	Decoding acute pain with combined EEG and physiological data. , 2017, , .		10
22	Pain and self-preservation in autonomous robots: From neurobiological models to psychiatric disease. , 2017, , .		1
23	Parallel reward and punishment control in humans and robots: Safe reinforcement learning using the MaxPain algorithm. , 2017, , .		13
24	Induced sensorimotor brain plasticity controls pain in phantom limb patients. Nature Communications, 2016, 7, 13209.	12.8	69
25	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
26	Dissociable Learning Processes Underlie Human Pain Conditioning. Current Biology, 2016, 26, 52-58.	3.9	70
27	When is a loss a loss? Excitatory and inhibitory processes in loss-related decision-making. Current Opinion in Behavioral Sciences, 2015, 5, 122-127.	3.9	18
28	Accounting for Behavior in Treatment Effects: New Applications for Blind Trials. PLoS ONE, 2015, 10, e0127227.	2.5	17
29	Pain: A Distributed Brain Information Network?. PLoS Biology, 2015, 13, e1002037.	5.6	36
30	Anticipation and Choice Heuristics in the Dynamic Consumption of Pain Relief. PLoS Computational Biology, 2015, 11, e1004030.	3.2	4
31	Modulating the pain networkâ€"neurostimulation for central poststroke pain. Nature Reviews Neurology, 2015, 11, 290-299.	10.1	90
32	Distinct Contributions of Ventromedial and Dorsolateral Subregions of the Human Substantia Nigra to Appetitive and Aversive Learning. Journal of Neuroscience, 2015, 35, 14220-14233.	3.6	62
33	Does temporal discounting explain unhealthy behavior? A systematic review and reinforcement learning perspective. Frontiers in Behavioral Neuroscience, 2014, 8, 76.	2.0	185
34	State-dependent value representation: evidence from the striatum. Frontiers in Neuroscience, 2014, 8, 193.	2.8	3
35	Relative Valuation of Pain in Human Orbitofrontal Cortex. Journal of Neuroscience, 2014, 34, 14526-14535.	3.6	43
36	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

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37	The neural signature of escalating frustration in humans. Cortex, 2014, 54, 165-178.	2.4	77
38	Decisions about Decisions. Neuron, 2014, 81, 468-470.	8.1	2
39	Technology for Chronic Pain. Current Biology, 2014, 24, R930-R935.	3.9	13
40	Decoding the matrix: Benefits and limitations of applying machine learning algorithms to pain neuroimaging. Pain, 2014, 155, 864-867.	4.2	44
41	Prices need no preferences: Social trends determine decisions in experimental markets for pain relief.. Health Psychology, 2014, 33, 66-76.	1.6	7
42	Uncertainty Increases Pain: Evidence for a Novel Mechanism of Pain Modulation Involving the Periaqueductal Gray. Journal of Neuroscience, 2013, 33, 5638-5646.	3.6	109
43	Dread and the Disvalue of Future Pain. PLoS Computational Biology, 2013, 9, e1003335.	3.2	38
44	Serotonin Selectively Modulates Reward Value in Human Decision-Making. Journal of Neuroscience, 2012, 32, 5833-5842.	3.6	211
45	Dopamine and performance in a reinforcement learning task: evidence from Parkinsonâ€™s disease. Brain, 2012, 135, 1871-1883.	7.6	137
46	Converging evidence for central 5-HT effects in acute tryptophan depletion. Molecular Psychiatry, 2012, 17, 121-123.	7.9	66
47	The maladaptive brain: excitable pathways to chronic pain. Brain, 2012, 135, 316-318.	7.6	4
48	Can, and should, behavioural neuroscience influence public policy?. Trends in Cognitive Sciences, 2012, 16, 449-451.	7.8	8
49	The Effect of Motivation on Movement: A Study of Bradykinesia in Parkinsonâ€™s Disease. PLoS ONE, 2012, 7, e47138.	2.5	28
50	Altruistic Learning. , 2012, , 208-210.		0
51	Model-Based Influences on Humans' Choices and Striatal Prediction Errors. Neuron, 2011, 69, 1204-1215.	8.1	1,388
52	Differentiable Neural Substrates for Learned and Described Value and Risk. Current Biology, 2010, 20, 1823-1829.	3.9	60
53	Choosing to Make an Effort: The Role of Striatum in Signaling Physical Effort of a Chosen Action. Journal of Neurophysiology, 2010, 104, 313-321.	1.8	213
54	Pain Relativity in Motor Control. Psychological Science, 2010, 21, 840-847.	3.3	16

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55	Neural Mechanisms of Belief Inference during Cooperative Games. Journal of Neuroscience, 2010, 30, 10744-10751.	3.6	169
56	Insula and Striatum Mediate the Default Bias. Journal of Neuroscience, 2010, 30, 14702-14707.	3.6	39
57	Dopamine, Time, and Impulsivity in Humans. Journal of Neuroscience, 2010, 30, 8888-8896.	3.6	256
58	Altruistic Learning. Frontiers in Behavioral Neuroscience, 2009, 3, 23.	2.0	8
59	Neural Activity Associated with the Passive Prediction of Ambiguity and Risk for Aversive Events. Journal of Neuroscience, 2009, 29, 1648-1656.	3.6	114
60	From Threat to Fear: The Neural Organization of Defensive Fear Systems in Humans. Journal of Neuroscience, 2009, 29, 12236-12243.	3.6	384
61	Encoding of Marginal Utility across Time in the Human Brain. Journal of Neuroscience, 2009, 29, 9575-9581.	3.6	183
62	A Genetically Mediated Bias in Decision Making Driven by Failure of Amygdala Control. Journal of Neuroscience, 2009, 29, 5985-5991.	3.6	183
63	The Role of Human Orbitofrontal Cortex in Value Comparison for Incommensurable Objects. Journal of Neuroscience, 2009, 29, 8388-8395.	3.6	260
64	Choking on the Money. Psychological Science, 2009, 20, 955-962.	3.3	81
65	A Key Role for Similarity in Vicarious Reward. Science, 2009, 324, 900-900.	12.6	230
66	The Price of Pain and the Value of Suffering. Psychological Science, 2009, 20, 309-317.	3.3	73
67	Values and Actions in Aversion. , 2009, , 175-191.		36
68	Anchors, scales and the relative coding of value in the brain. Current Opinion in Neurobiology, 2008, 18, 173-178.	4.2	124
69	Striatal Activity Underlies Novelty-Based Choice in Humans. Neuron, 2008, 58, 967-973.	8.1	210
70	Emotion, Decision Making, and the Amygdala. Neuron, 2008, 58, 662-671.	8.1	253
71	Modulation of pain ratings by expectation and uncertainty: Behavioral characteristics and anticipatory neural correlates. Pain, 2008, 135, 240-250.	4.2	173
72	Confidence in beliefs about pain predicts expectancy effects on pain perception and anticipatory processing in right anterior insula. Pain, 2008, 139, 324-332.	4.2	69

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73	Blocking Central Opiate Function Modulates Hedonic Impact and Anterior Cingulate Response to Rewards and Losses. Journal of Neuroscience, 2008, 28, 10509-10516.	3.6	101
74	Human Pavlovianâ€“Instrumental Transfer. Journal of Neuroscience, 2008, 28, 360-368.	3.6	264
75	When Fear Is Near: Threat Imminence Elicits Prefrontal-Periaqueductal Gray Shifts in Humans. Science, 2007, 317, 1079-1083.	12.6	798
76	Differential Encoding of Losses and Gains in the Human Striatum. Journal of Neuroscience, 2007, 27, 4826-4831.	3.6	396
77	Research loses in hasty changes to medical training. Nature, 2007, 446, 492-492.	27.8	0
78	The neurobiology of punishment. Nature Reviews Neuroscience, 2007, 8, 300-311.	10.2	210
79	Contingency awareness in human aversive conditioning involves the middle frontal gyrus. NeuroImage, 2006, 29, 1007-1012.	4.2	125
80	Predictive Neural Coding of Reward Preference Involves Dissociable Responses in Human Ventral Midbrain and Ventral Striatum. Neuron, 2006, 49, 157-166.	8.1	286
81	Empathic neural responses are modulated by the perceived fairness of others. Nature, 2006, 439, 466-469.	27.8	1,470
82	Cortical substrates for exploratory decisions in humans. Nature, 2006, 441, 876-879.	27.8	1,790
83	Dopamine-dependent prediction errors underpin reward-seeking behaviour in humans. Nature, 2006, 442, 1042-1045.	27.8	1,351
84	The misbehavior of value and the discipline of the will. Neural Networks, 2006, 19, 1153-1160.	5.9	310
85	Frames, Biases, and Rational Decision-Making in the Human Brain. Science, 2006, 313, 684-687.	12.6	1,238
86	Context-Dependent Human Extinction Memory Is Mediated by a Ventromedial Prefrontal and Hippocampal Network. Journal of Neuroscience, 2006, 26, 9503-9511.	3.6	464
87	Carry on Eating: Neural Pathways Mediating Conditioned Potentiation of Feeding. Journal of Neuroscience, 2006, 26, 1061-1062.	3.6	2
88	Opponent appetitive-aversive neural processes underlie predictive learning of pain relief. Nature Neuroscience, 2005, 8, 1234-1240.	14.8	384
89	Anxiety Reduction through Detachment: Subjective, Physiological, and Neural Effects. Journal of Cognitive Neuroscience, 2005, 17, 874-883.	2.3	270
90	Modulation of pain processing in hyperalgesia by cognitive demand. NeuroImage, 2005, 27, 59-69.	4.2	147

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91	Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667.	27.8	557
92	Empathy for Pain Involves the Affective but not Sensory Components of Pain. Science, 2004, 303, 1157-1162.	12.6	3,265