Catherine E Myers

List of Publications by Year
in descending order

132 papers	5,542 citations	81900 39 h-index	98798 67 g-index
138 all docs	138 docs citations	138 times ranked	4536 citing authors

#	Article	IF	Citations
1	Hippocampal mediation of stimulus representation: A computational theory. Hippocampus, 1993, 3, 491-516.	1.9	453
2	Reward-learning and the novelty-seeking personality: a between- and within-subjects study of the effects of dopamine agonists on young Parkinson's patients. Brain, 2009, 132, 2385-2395.	7.6	310
3	How do People Solve the "Weather Prediction" Task?: Individual Variability in Strategies for Probabilistic Category Learning. Learning and Memory, 2002, 9, 408-418.	1.3	213
4	Dopaminergic Drugs Modulate Learning Rates and Perseveration in Parkinson's Patients in a Dynamic Foraging Task. Journal of Neuroscience, 2009, 29, 15104-15114.	3.6	213
5	Dissociating Hippocampal versus Basal Ganglia Contributions to Learning and Transfer. Journal of Cognitive Neuroscience, 2003, 15, 185-193.	2.3	184
6	A role for hilar cells in pattern separation in the dentate gyrus: A computational approach. Hippocampus, 2009, 19, 321-337.	1.9	162
7	Role of the Basal Ganglia in Category Learning: How Do Patients With Parkinson's Disease Learn?. Behavioral Neuroscience, 2004, 118, 676-686.	1.2	158
8	Hilar mossy cells of the dentate gyrus: a historical perspective. Frontiers in Neural Circuits, 2012, 6, 106.	2.8	158
9	l-dopa impairs learning, but spares generalization, in Parkinson's disease. Neuropsychologia, 2006, 44, 774-784.	1.6	135
10	Context, conditioning, and hippocampal rerepresentation in animal learning.. Behavioral Neuroscience, 1994, 108, 835-847.	1.2	122
11	Pattern separation in the dentate gyrus: A role for the CA3 backprojection. Hippocampus, 2011, 21, 1190-1215.	1.9	109
12	PSYCHOBIOLOGICAL MODELS OF HIPPOCAMPAL FUNCTION IN LEARNING AND MEMORY. Annual Review of Psychology, 1997, 48, 481-514.	17.7	102
13	The role of dopamine in cognitive sequence learning: evidence from Parkinson's disease. Behavioural Brain Research, 2005, 156, 191-199.	2.2	99
14	Neural Mechanisms Underlying Probabilistic Category Learning in Normal Aging. Journal of Neuroscience, 2005, 25, 11340-11348.	3.6	95
15	Impaired probabilistic category learning in hypoxic subjects with hippocampal damage. Neuropsychologia, 2004, 42, 524-535.	1.6	94
16	A model of amygdala–hippocampal–prefrontal interaction in fear conditioning and extinction in animals. Brain and Cognition, 2013, 81, 29-43.	1.8	94
17	Sleep enhances category learning. Learning and Memory, 2009, 16, 751-755.	1.3	91
18	Computational models of the hippocampal region: linking incremental learning and episodic memory. Trends in Cognitive Sciences, 2003, 7, 269-276.	7.8	74

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19	Neural Correlates of Probabilistic Category Learning in Patients with Schizophrenia. Journal of Neuroscience, 2009, 29, 1244-1254.	3.6	69
20	A Computational Model of Cholinergic Disruption of Septohippocampal Activity in Classical Eyeblink Conditioning. Neurobiology of Learning and Memory, 1996, 66, 51-66.	1.9	67
21	The Influence of Ectopic Migration of Granule Cells into the Hilus on Dentate Gyrus-CA3 Function. PLoS ONE, 2013, 8, e68208.	2.5	63
22	Hippocampal Atrophy Disrupts Transfer Generalization in Nondemented Elderly. Journal of Geriatric Psychiatry and Neurology, 2002, 15, 82-90.	2.3	61
23	Distinct Hippocampal and Basal Ganglia Contributions to Probabilistic Learning and Reversal. Journal of Cognitive Neuroscience, 2009, 21, 1820-1832.	2.3	61
24	Dissociation between medial temporal lobe and basal ganglia memory systems in schizophrenia. Schizophrenia Research, 2005, 77, 321-328.	2.0	60
25	Strategies in probabilistic categorization: Results from a new way of analyzing performance. Learning and Memory, 2006, 13, 230-239.	1.3	58
26	Learning from negative feedback in patients with major depressive disorder is attenuated by SSRI antidepressants. Frontiers in Integrative Neuroscience, 2013, 7, 67.	2.1	58
27	Behaviorally inhibited temperament is associated with severity of post-traumatic stress disorder symptoms and faster eyeblink conditioning in veterans. Stress, 2012, 15, 31-44.	1.8	54
28	Dissociation of hippocampal and entorhinal function in associative learning: A computational approach. Cognitive, Affective and Behavioral Neuroscience, 1995, 23, 116-138.	1.3	54
29	Probabilistic reward- and punishment-based learning in opioid addiction: Experimental and computational data. Behavioural Brain Research, 2016, 296, 240-248.	2.2	51
30	Behavioral inhibition and PTSD symptoms in veterans. Psychiatry Research, 2012, 196, 271-276.	3.3	50
31	Acquisition and Extinction of Human Avoidance Behavior: Attenuating Effect of Safety Signals and Associations with Anxiety Vulnerabilities. Frontiers in Behavioral Neuroscience, 2014, 8, 323.	2.0	50
32	Integrating Incremental Learning and Episodic Memory Models of the Hippocampal Region.. Psychological Review, 2005, 112, 560-585.	3.8	47
33	Behaviourally inhibited temperament and female sex, two vulnerability factors for anxiety disorders, facilitate conditioned avoidance (also) in humans. Behavioural Processes, 2014, 103, 228-235.	1.1	47
34	Extending Models of Hippocampal Function in Animal Conditioning to Human Amnesia. Memory, 1997, 5, 179-212.	1.7	46
35	Learning to Obtain Reward, but Not Avoid Punishment, Is Affected by Presence of PTSD Symptoms in Male Veterans: Empirical Data and Computational Model. PLoS ONE, 2013, 8, e72508.	2.5	44
36	A neural model of hippocampal–striatal interactions in associative learning and transfer generalization in various neurological and psychiatric patients. Brain and Cognition, 2010, 74, 132-144.	1.8	43

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37	General functioning predicts reward and punishment learning in schizophrenia. Schizophrenia Research, 2011, 127, 131-136.	2.0	42
38	Cerebellar Substrates for Error Correction in Motor Conditioning. Neurobiology of Learning and Memory, 2001, 76, 314-341.	1.9	41
39	A neurocomputational model of classical conditioning phenomena: A putative role for the hippocampal region in associative learning. Brain Research, 2009, 1276, 180-195.	2.2	39
40	Individuals with posttraumatic stress disorder show a selective deficit in generalization of associative learning.. Neuropsychology, 2012, 26, 758-767.	1.3	38
41	Associative Learning, Acquired Equivalence, and Flexible Generalization of Knowledge in Mild Alzheimer Disease. Cognitive and Behavioral Neurology, 2009, 22, 89-94.	0.9	37
42	Dissociating medial temporal and basal ganglia memory systems with a latent learning task. Neuropsychologia, 2003, 41, 1919-1928.	1.6	36
43	Relative Risk of Probabilistic Category Learning Deficits in Patients with Schizophrenia and Their Siblings. Biological Psychiatry, 2010, 67, 948-955.	1.3	36
44	Vulnerability factors in anxiety: Strain and sex differences in the use of signals associated with non-threat during the acquisition and extinction of active-avoidance behavior. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2011, 35, 1659-1670.	4.8	36
45	Learning and generalization deficits in patients with memory impairments due to anterior communicating artery aneurysm rupture or hypoxic brain injury.. Neuropsychology, 2008, 22, 681-686.	1.3	35
46	How to find the way out from four rooms? The learning of â€œchainingâ€•associations may shed light on the neuropsychology of the deficit syndrome of schizophrenia. Schizophrenia Research, 2008, 99, 200-207.	2.0	34
47	Associative learning in deficit and nondeficit schizophrenia. NeuroReport, 2008, 19, 55-58.	1.2	34
48	Testing the role of reward and punishment sensitivity in avoidance behavior: A computational modeling approach. Behavioural Brain Research, 2015, 283, 121-138.	2.2	34
49	Selectively Impaired Associative Learning in Older People with Cognitive Decline. Journal of Cognitive Neuroscience, 2002, 14, 484-492.	2.3	33
50	Cognitive sequence learning in Parkinson's disease and amnestic mild cognitive impairment: Dissociation between sequential and non-sequential learning of associations. Neuropsychologia, 2007, 45, 1386-1392.	1.6	33
51	Associative Learning Over Trials Activates the Hippocampus in Healthy Elderly but not Mild Cognitive Impairment. Aging, Neuropsychology, and Cognition, 2008, 15, 129-145.	1.3	33
52	Corruption of the dentate gyrus by â€œdominantâ€•granule cells: Implications for dentate gyrus function in health and disease. Neurobiology of Learning and Memory, 2016, 129, 69-82.	1.9	33
53	Î±-Synuclein gene duplication impairs reward learning. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15992-15994.	7.1	32
54	Greater avoidance behavior in individuals with posttraumatic stress disorder symptoms. Stress, 2017, 20, 285-293.	1.8	31

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55	Intolerance of uncertainty in opioid dependency â€" Relationship with trait anxiety and impulsivity. PLoS ONE, 2017, 12, e0181955.	2.5	28
56	A connectionist model of septohippocampal dynamics during conditioning: Closing the loop.. Behavioral Neuroscience, 2002, 116, 48-62.	1.2	27
57	Why trace and delay conditioning are sometimes (but not always) hippocampal dependent: A computational model. Brain Research, 2013, 1493, 48-67.	2.2	27
58	Depression impairs learning, whereas the selective serotonin reuptake inhibitor, paroxetine, impairs generalization in patients with major depressive disorder. Journal of Affective Disorders, 2013, 151, 484-492.	4.1	27
59	Enhanced avoidance learning in behaviorally inhibited young men and women. Stress, 2013, 16, 289-299.	1.8	27
60	Exaggerated Acquisition and Resistance to Extinction of Avoidance Behavior in Treated Heroin-Dependent Men. Journal of Clinical Psychiatry, 2016, 77, 386-394.	2.2	27
61	Learning and generalization from reward and punishment in opioid addiction. Behavioural Brain Research, 2017, 317, 122-131.	2.2	27
62	Avoidance prone individuals self reporting behavioral inhibition exhibit facilitated acquisition and altered extinction of conditioned eyeblinks with partial reinforcement schedules. Frontiers in Behavioral Neuroscience, 2014, 8, 347.	2.0	26
63	Representation and Association in Memory: A Neurocomputational View of Hippocampal Function. Current Directions in Psychological Science, 1995, 4, 23-29.	5.3	25
64	Cortico-hippocampal representations in simultaneous odor discrimination: A computational interpretation of Eichenbaum, Mathews, and Cohen (1989).. Behavioral Neuroscience, 1996, 110, 685-706.	1.2	25
65	The role of the orbitofrontal cortex in human discrimination learning. Neuropsychologia, 2008, 46, 1326-1337.	1.6	23
66	Impaired delay eyeblink classical conditioning in individuals with anterograde amnesia resulting from anterior communicating artery aneurysm rupture.. Behavioral Neuroscience, 2001, 115, 560-570.	1.2	22
67	A comparison of latent inhibition and learned irrelevance pre-exposure effects in rabbit and human eyeblink conditioning. Integrative Psychological and Behavioral Science, 2002, 37, 188-214.	0.3	22
68	Cortico-hippocampal interaction and adaptive stimulus representation: A neurocomputational theory of associative learning and memory. Neural Networks, 2005, 18, 1265-1279.	5.9	22
69	Stimulusâ€"response learning in long-term cocaine users: Acquired equivalence and probabilistic category learning. Drug and Alcohol Dependence, 2008, 93, 155-162.	3.2	22
70	Procedural Learning in Schizophrenia: Reconciling the Discrepant Findings. Biological Psychiatry, 2011, 69, 49-54.	1.3	22
71	The Relationship between Associative Learning, Transfer Generalization, and Homocysteine Levels in Mild Cognitive Impairment. PLoS ONE, 2012, 7, e46496.	2.5	22
72	Altered activity of the medial prefrontal cortex and amygdala during acquisition and extinction of an active avoidance task. Frontiers in Behavioral Neuroscience, 2015, 9, 249.	2.0	22

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73	Learning and Generalization Tasks Predict Short-Term Cognitive Outcome in Nondemented Elderly. Journal of Geriatric Psychiatry and Neurology, 2008, 21, 93-103.	2.3	21
74	Depression Impairs Learning Whereas Anticholinergics Impair Transfer Generalization in Parkinson Patients Tested on Dopaminergic Medications. Cognitive and Behavioral Neurology, 2010, 23, 98-105.	0.9	21
75	Acquired Equivalence in U.S. Veterans With Symptoms of Posttraumatic Stress: Reexperiencing Symptoms Are Associated With Greater Generalization. Journal of Traumatic Stress, 2014, 27, 717-720.	1.8	21
76	ABCA7 risk variant in healthy older African Americans is associated with a functionally isolated entorhinal cortex mediating deficient generalization of prior discrimination training. Hippocampus, 2019, 29, 527-538.	1.9	21
77	Further implications of a computational model of septohippocampal cholinergic modulation in eyeblink conditioning. Cognitive, Affective and Behavioral Neuroscience, 1998, 26, 1-20.	1.3	21
78	The Personality Trait of Intolerance to Uncertainty Affects Behavior in a Novel Computer-Based Conditioned Place Preference Task. Frontiers in Psychology, 2016, 7, 1175.	2.1	19
79	Beyond symptom self-report: use of a computer â€œavatarâ€•to assess post-traumatic stress disorder (PTSD) symptoms. Stress, 2016, 19, 593-598.	1.8	19
80	Enhanced conditioned eyeblink response acquisition and proactive interference in anxiety vulnerable individuals. Frontiers in Behavioral Neuroscience, 2012, 6, 76.	2.0	18
81	Integrating behavioral and physiological models of hippocampal function. , 1996, 6, 643-653.		17
82	Computational Models of the Hippocampal Region: Implications for Prediction of Risk for Alzheimers Disease in Non-demented Elderly. Current Alzheimer Research, 2006, 3, 247-257.	1.4	17
83	A computational model of mechanisms controlling experience-dependent reorganization of representational maps in auditory cortex. Cognitive, Affective and Behavioral Neuroscience, 2001, 1, 37-55.	2.0	16
84	Increased generalization of learned associations is related to re-experiencing symptoms in veterans with symptoms of post-traumatic stress. Stress, 2015, 18, 484-489.	1.8	16
85	Depression Reduces Accuracy While Parkinsonism Slows Response Time for Processing Positive Feedback in Patients with Parkinsonâ€™s Disease with Comorbid Major Depressive Disorder Tested on a Probabilistic Category-Learning Task. Frontiers in Psychiatry, 2017, 8, 84.	2.6	16
86	Stress-Related Mental Health Symptoms in Coast Guard: Incidence, Vulnerability, and Neurocognitive Performance. Frontiers in Psychology, 2017, 8, 1513.	2.1	15
87	Avoidance as expectancy in rats: sex and strain differences in acquisition. Frontiers in Behavioral Neuroscience, 2014, 8, 334.	2.0	14
88	Towards the objective assessment of suicidal states: Some neurocognitive deficits may be temporally related to suicide attempt. Psychiatry Research, 2020, 287, 112624.	3.3	14
89	Modeling auditory cortical processing as an adaptive chirplet transform. Neurocomputing, 2000, 32-33, 913-919.	5.9	13
90	Impaired Generalization of Associative Learning in Patients with Alcohol Dependence After Intermediate-term Abstinence. Alcohol and Alcoholism, 2012, 47, 533-537.	1.6	13

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91	Inhibited Personality Temperaments Translated Through Enhanced Avoidance and Associative Learning Increase Vulnerability for PTSD. Frontiers in Psychology, 2019, 10, 496.	2.1	13
92	A connectionist model of septohippocampal dynamics during conditioning: closing the loop. Behavioral Neuroscience, 2002, 116, 48-62.	1.2	13
93	Latent learning in medial temporal amnesia: Evidence for disrupted representational but preserved attentional processes.. Neuropsychology, 2000, 14, 3-15.	1.3	12
94	ITI-Signals and Prelimbic Cortex Facilitate Avoidance Acquisition and Reduce Avoidance Latencies, Respectively, in Male WKY Rats. Frontiers in Behavioral Neuroscience, 2014, 8, 403.	2.0	12
95	The influence of trial order on learning from reward vs. punishment in a probabilistic categorization task: experimental and computational analyses. Frontiers in Behavioral Neuroscience, 2015, 9, 153.	2.0	12
96	Dissociating basal forebrain and medial temporal amnesic syndromes: Insights from classical conditioning. Integrative Psychological and Behavioral Science, 2002, 37, 85-102.	0.3	11
97	Selective hippocampal lesions disrupt a novel cue effect but fail to eliminate blocking in rabbit eyeblink conditioning. Cognitive, Affective and Behavioral Neuroscience, 2002, 2, 318-328.	2.0	11
98	Absence of Ã¢â‚¬Å"Warm-UpÃ¢â‚¬Â•during Active Avoidance Learning in a Rat Model of Anxiety Vulnerability: Insights from Computational Modeling. Frontiers in Behavioral Neuroscience, 2014, 8, 283.	2.0	11
99	Watch what I do, not what I say I do: Computer-based avatars to assess behavioral inhibition, a vulnerability factor for anxiety disorders. Computers in Human Behavior, 2016, 55, 804-816.	8.5	10
100	Beyond Behavioral Inhibition: A Computer Avatar Task Designed to Assess Behavioral Inhibition Extends to Harm Avoidance. Frontiers in Psychology, 2017, 8, 1560.	2.1	10
101	A computational perspective on dissociating hippocampal and entorhinal function. Behavioral and Brain Sciences, 1994, 17, 476-477.	0.7	9
102	Stimulus exposure effects in human associative learning. Quarterly Journal of Experimental Psychology Section B: Comparative and Physiological Psychology, 2000, 53, 173-187.	2.8	9
103	Learning and Generalization in Healthy Aging. Cognitive and Behavioral Neurology, 2012, 25, 7-15.	0.9	9
104	A decrement in probabilistic category learning in cocaine users after controlling for marijuana and alcohol use.. Experimental and Clinical Psychopharmacology, 2014, 22, 65-74.	1.8	9
105	Post-traumatic stress disorder symptom burden and gender each affect generalization in a reward- and punishment-learning task. PLoS ONE, 2017, 12, e0172144.	2.5	9
106	Intolerance of uncertainty and conditioned place preference in opioid addiction. PeerJ, 2018, 6, e4775.	2.0	9
107	Conditional spatial discrimination in humans with hypoxic brain injury. Cognitive, Affective and Behavioral Neuroscience, 2000, 28, 275-282.	1.3	9
108	Deficits in hippocampalâ€dependent transfer generalization learning accompany synaptic dysfunction in a mouse model of amyloidosis. Hippocampus, 2016, 26, 455-471.	1.9	8

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109	Parallel neural systems for classical conditioning: Support from computational modeling. Integrative Psychological and Behavioral Science, 2001, 36, 36-61.	0.3	7
110	Impairment of memory generalization in preclinical autosomal dominant Alzheimer's disease mutation carriers. Neurobiology of Aging, 2018, 65, 149-157.	3.1	7
111	Demonstrating and disrupting well-learned habits. PLoS ONE, 2020, 15, e0234424.	2.5	7
112	A reinforcement-learning model of active avoidance behavior: Differences between Sprague Dawley and Wistar-Kyoto rats. Behavioural Brain Research, 2020, 393, 112784.	2.2	7
113	The personality trait of behavioral inhibition modulates perceptions of moral character and performance during the trust game: behavioral results and computational modeling. PeerJ, 2016, 4, e1631.	2.0	7
114	Attentional control may be modifiable with Mindfulness-Based Cognitive Therapy to Prevent Suicide. Behaviour Research and Therapy, 2021, 147, 103988.	3.1	7
115	Effects of Psychotropic Agents on Extinction of Lever-Press Avoidance in a Rat Model of Anxiety Vulnerability. Frontiers in Behavioral Neuroscience, 2014, 8, 322.	2.0	6
116	Hippocampal BOLD response during category learning predicts subsequent performance on transfer generalization. Human Brain Mapping, 2014, 35, 3122-3131.	3.6	6
117	Pyridostigmine bromide, chlorpyrifos, and DEET combined Gulf War exposure insult depresses mitochondrial function in neuroblastoma cells. Journal of Biochemical and Molecular Toxicology, 2021, 35, e22913.	3.0	6
118	Amnesic patients show superior generalization in category learning.. Neuropsychology, 2016, 30, 915-919.	1.3	6
119	The Role of Informative and Ambiguous Feedback in Avoidance Behavior: Empirical and Computational Findings. PLoS ONE, 2015, 10, e0144083.	2.5	5
120	Learning functions in short-term cocaine users. Addictive Behaviors Reports, 2019, 9, 100169.	1.9	4
121	Stimulus exposure effects in human associative learning. Quarterly Journal of Experimental Psychology Section B: Comparative and Physiological Psychology, 2000, 53, 173-187.	2.8	4
122	Reward and punishment-based compound cue learning and generalization in opiate dependency. Experimental Brain Research, 2017, 235, 3153-3162.	1.5	3
123	A pilot study of escape, avoidance, and approach behaviors in treated alcohol-dependent males. Journal of Clinical and Experimental Neuropsychology, 2019, 41, 601-614.	1.3	3
124	Psychobiological Models of Hippocampal Function in Learning and Memory. , 1998, , 417-448.		3
125	Using signals associated with safety in avoidance learning: computational model of sex differences. PeerJ, 2015, 3, e1081.	2.0	3
126	A dynamic model of learning in the septo-hippocampal system. Neurocomputing, 2000, 32-33, 501-507.	5.9	2

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127	Maladaptive avoidance patterns in Parkinson's disease are exacerbated by symptoms of depression. Behavioural Brain Research, 2020, 382, 112473.	2.2	2
128	Post-traumatic stress symptoms are associated with better performance on a delayed match-to-position task. PeerJ, 2018, 6, e4701.	2.0	2
129	Neural Network Approaches to Eyeblink Classical Conditioning. , 2002, , 229-255.		1
130	Using an animal learning model of the hippocampus to simulate human fMRI data. , 2010, , .		1
131	A Neural-Network Approach to Adaptive Similarity and Stimulus Representations in Cortico-Hippocampal Function. Advances in Psychology, 1997, 121, 220-241.	0.1	0
132	Dataset of active avoidance in Wistar-Kyoto and Sprague Dawley rats: Experimental data and reinforcement learning model code and output. Data in Brief, 2020, 32, 106074.	1.0	0