F Gregory Ashby

List of Publications by Year in Descending Order

116 papers	10,310 citations	41 h-index	101 g-index
118 ext. papers	11,243 ext. citations	4.3 avg, IF	6.38 L-index

#	Paper	IF	Citations
116	State trace analysis: What it can and cannot do. *Journal of Mathematical Psychology*, **2022**, 108, 102655	1.2	0
115	On what it means to automatize a rule. *Cognition*, **2022**, 226, 105168	3.5	
114	When instructions don't help: Knowing the optimal strategy facilitates rule-based but not information-integration category learning. *Journal of Experimental Psychology: Human Perception and Performance*, **2021**, 47, 1226-1236	2.6	0
113	A neurocomputational theory of how rule-guided behaviors become automatic. *Psychological Review*, **2021**, 128, 488-508	6.3	1
112	Modulation of Dopamine for Adaptive Learning: A Neurocomputational Model. *Computational Brain & Behavior*, **2021**, 4, 34-52	2	
111	Dissociations between rule-based and information-integration categorization are not caused by differences in task difficulty. *Memory and Cognition*, **2020**, 48, 541-552	2.2	5
110	A role for the medial temporal lobes in category learning. *Learning and Memory*, **2020**, 27, 441-450	2.8	
109	State-trace analysis misinterpreted and misapplied: Reply to Stephens, Matzke, and Hayes (2019). *Journal of Mathematical Psychology*, **2019**, 91, 195-200	1.2	2
108	A difficulty predictor for perceptual category learning. *Journal of Vision*, **2019**, 19, 20	0.4	1
107	Novel representations that support rule-based categorization are acquired on-the-fly during category learning. *Psychological Research*, **2019**, 83, 544-566	2.5	6
106	Testing analogical rule transfer in pigeons (Columba livia). *Cognition*, **2019**, 183, 256-268	3.5	11
105	Trial-by-trial switching between procedural and declarative categorization systems. *Psychological Research*, **2018**, 82, 371-384	2.5	4
104	Linking signal detection theory and encoding models to reveal independent neural representations from neuroimaging data. *PLoS Computational Biology*, **2018**, 14, e1006470	5	3
103	Retinal-specific category learning. *Nature Human Behaviour*, **2018**, 2, 500-506	12.8	4
102	Hierarchical control of procedural and declarative category-learning systems. *NeuroImage*, **2017**, 150, 150-161	7.9	5
101	Perceptual category learning and visual processing: An exercise in computational cognitive neuroscience. *Neural Networks*, **2017**, 89, 31-38	9.1	8
100	Multiple Systems of Perceptual Category Learning **2017**, 157-188		30

99	Testing Separability and Independence of Perceptual Dimensions with General Recognition Theory: A Tutorial and New R Package (). *Frontiers in Psychology*, **2017**, 8, 696	3.4	11
98	Quantitative modeling of category learning deficits in various patient populations. *Neuropsychology*, **2017**, 31, 862-876	3.8	2
97	A neural interpretation of exemplar theory. *Psychological Review*, **2017**, 124, 472-482	6.3	20
96	Dopamine dependence in aggregate feedback learning: A computational cognitive neuroscience approach. *Brain and Cognition*, **2016**, 109, 1-18	2.7	4
95	What is automatized during perceptual categorization?. *Cognition*, **2016**, 154, 22-33	3.5	7
94	Expanding the role of striatal cholinergic interneurons and the midbrain dopamine system in appetitive instrumental conditioning. *Journal of Neurophysiology*, **2016**, 115, 240-54	3.2	9
93	Declarative strategies persist under increased cognitive load. *Psychonomic Bulletin and Review*, **2016**, 23, 213-22	4.1	4
92	The role of feedback contingency in perceptual category learning. *Journal of Experimental Psychology: Learning Memory and Cognition*, **2016**, 42, 1731-1746	2.2	10
91	Dissociable changes in functional network topology underlie early category learning and development of automaticity. *NeuroImage*, **2016**, 141, 220-241	7.9	8
90	Neural networks underlying the metacognitive uncertainty response. *Cortex*, **2015**, 71, 306-22	3.8	21
89	Categorization training increases the perceptual separability of novel dimensions. *Cognition*, **2015**, 139, 105-29	3.5	19
88	Multiple stages of learning in perceptual categorization: evidence and neurocomputational theory. *Psychonomic Bulletin and Review*, **2015**, 22, 1598-613	4.1	25
87	Learning robust cortico-cortical associations with the basal ganglia: an integrative review. *Cortex*, **2015**, 64, 123-35	3.8	116
86	General recognition theory with individual differences: a new method for examining perceptual and decisional interactions with an application to face perception. *Psychonomic Bulletin and Review*, **2015**, 22, 88-111	4.1	26
85	Procedural learning during declarative control. *Journal of Experimental Psychology: Learning Memory and Cognition*, **2015**, 41, 1388-403	2.2	7
84	Generalization of category knowledge and dimensional categorization in humans (Homo sapiens) and nonhuman primates (Macaca mulatta). *Journal of Experimental Psychology Animal Learning and Cognition*, **2015**, 41, 322-35	1.4	12
83	Differential effects of dopamine-directed treatments on cognition. *Neuropsychiatric Disease and Treatment*, **2015**, 11, 1859-75	3.1	18
82	Simulating category learning and set shifting deficits in patients weight-restored from anorexia nervosa. *Neuropsychology*, **2014**, 28, 741-51	3.8	18

81	A computational model of the temporal dynamics of plasticity in procedural learning: sensitivity to feedback timing. *Frontiers in Psychology*, **2014**, 5, 643	3.4	6
80	Deferred feedback sharply dissociates implicit and explicit category learning. *Psychological Science*, **2014**, 25, 447-57	7.9	52
79	Is state-trace analysis an appropriate tool for assessing the number of cognitive systems?. *Psychonomic Bulletin and Review*, **2014**, 21, 935-46	4.1	16
78	Response-mode shifts during sequence learning of macaque monkeys. *Psychological Research*, **2013**, 77, 223-33	2.5	2
77	Brain activity across the development of automatic categorization: a comparison of categorization tasks using multi-voxel pattern analysis. *NeuroImage*, **2013**, 71, 284-97	7.9	16
76	Erasing the engram: the unlearning of procedural skills. *Journal of Experimental Psychology: General*, **2013**, 142, 710-41	4.7	19
75	A neurocomputational theory of how explicit learning bootstraps early procedural learning. *Frontiers in Computational Neuroscience*, **2013**, 7, 177	3.5	11
74	Analogical transfer in perceptual categorization. *Memory and Cognition*, **2012**, 40, 434-49	2.2	36
73	Implicit and explicit categorization: a tale of four species. *Neuroscience and Biobehavioral Reviews*, **2012**, 36, 2355-69	9	138
72	Unsupervised category learning with integral-dimension stimuli. *Quarterly Journal of Experimental Psychology*, **2012**, 65, 1537-62	1.8	16
71	A neurocomputational account of cognitive deficits in Parkinson's disease. *Neuropsychologia*, **2012**, 50, 2290-302	3.2	28
70	Implicit and explicit category learning by capuchin monkeys (Cebus apella). *Journal of Comparative Psychology (Washington, D C: 1983)*, **2012**, 126, 294-304	2.1	26
69	Procedural learning of unstructured categories. *Psychonomic Bulletin and Review*, **2012**, 19, 1202-9	4.1	11
68	Automaticity and multiple memory systems. *Wiley Interdisciplinary Reviews: Cognitive Science*, **2012**, 3, 363-376	4.5	35
67	Deconvolving BOLD activation in event-related designs for multivoxel pattern classification analyses. *NeuroImage*, **2012**, 59, 2636-43	7.9	347
66	Spatiotemporal activity estimation for multivoxel pattern analysis with rapid event-related designs. *NeuroImage*, **2012**, 62, 1429-38	7.9	47
65	Learning and transfer of category knowledge in an indirect categorization task. *Psychological Research*, **2012**, 76, 292-303	2.5	20
64	Cortical and striatal contributions to automaticity in information-integration categorization. *NeuroImage*, **2011**, 56, 1791-802	7.9	61

63	Human category learning 2.0. *Annals of the New York Academy of Sciences*, **2011**, 1224, 147-161	6.5	177
62	Information-integration category learning and the human uncertainty response. *Memory and Cognition*, **2011**, 39, 536-54	2.2	7
61	Pigeons' categorization may be exclusively nonanalytic. *Psychonomic Bulletin and Review*, **2011**, 18, 414-21	4.1	85
60	The Neurodynamics of Cognition: A Tutorial on Computational Cognitive Neuroscience. *Journal of Mathematical Psychology*, **2011**, 55, 273-289	1.2	34
59	A computational model of how cholinergic interneurons protect striatal-dependent learning. *Journal of Cognitive Neuroscience*, **2011**, 23, 1549-66	3.1	45
58	Evidence for cortical automaticity in rule-based categorization. *Journal of Neuroscience*, **2010**, 30, 14225-34	6.6	56
57	Interactions between declarative and procedural-learning categorization systems. *Neurobiology of Learning and Memory*, **2010**, 94, 1-12	3.1	38
56	Cortical and basal ganglia contributions to habit learning and automaticity. *Trends in Cognitive Sciences*, **2010**, 14, 208-15	14	314
55	Implicit and explicit category learning by macaques (Macaca mulatta) and humans (Homo sapiens). *Journal of Experimental Psychology*, **2010**, 36, 54-65		55
54	Automaticity in rule-based and information-integration categorization. *Attention, Perception, and Psychophysics*, **2010**, 72, 1013-31	2	55
53	Category label and response location shifts in category learning. *Psychological Research*, **2010**, 74, 219-36	2.5	34
52	A neurocomputational model of automaticity and maintenance of abstract rules **2009**,		3
51	Response processes in information-integration category learning. *Neurobiology of Learning and Memory*, **2008**, 90, 330-8	3.1	35
50	Initial training with difficult items facilitates information integration, but not rule-based category learning. *Psychological Science*, **2008**, 19, 1169-77	7.9	30
49	Fitting computational models to fMRI. *Behavior Research Methods*, **2008**, 40, 713-21	6.1	14
48	The Prep statistic as a measure of confidence in model fitting. *Psychonomic Bulletin and Review*, **2008**, 15, 16-27	4.1	11
47	A role for the perceptual representation memory system in category learning. *Perception & Psychophysics*, **2008**, 70, 983-99		37
46	The effects of positive versus negative feedback on information-integration category learning. *Perception & Psychophysics*, **2007**, 69, 865-78		38

45	A neurobiological theory of automaticity in perceptual categorization. *Psychological Review*, **2007**, 114, 632-56	6.3	205
44	The Role of the Basal Ganglia in Category Learning. *Psychology of Learning and Motivation - Advances in Research and Theory*, **2006**, 46, 1-36	1.4	53
43	The effects of category overlap on information-integration and rule-based category learning. *Perception & Psychophysics*, **2006**, 68, 1013-26		30
42	FROST: a distributed neurocomputational model of working memory maintenance. *Journal of Cognitive Neuroscience*, **2005**, 17, 1728-43	3.1	100
41	Human category learning. *Annual Review of Psychology*, **2005**, 56, 149-78	26.1	613
40	Category learning and multiple memory systems. *Trends in Cognitive Sciences*, **2005**, 9, 83-9	14	168
39	Dynamical trajectories in category learning. *Perception & Psychophysics*, **2004**, 66, 1318-40		3
38	Disrupting feedback processing interferes with rule-based but not information-integration category learning. *Memory and Cognition*, **2004**, 32, 582-91	2.2	141
37	The neurobiology of category learning. *Behavioral and Cognitive Neuroscience Reviews*, **2004**, 3, 101-13		47
36	Dissociating explicit and procedural-learning based systems of perceptual category learning. *Behavioural Processes*, **2004**, 66, 309-32	1.6	181
35	Delayed feedback effects on rule-based and information-integration category learning. *Journal of Experimental Psychology: Learning Memory and Cognition*, **2003**, 29, 650-62	2.2	238
34	Procedural learning in perceptual categorization. *Memory and Cognition*, **2003**, 31, 1114-25	2.2	164
33	A model of dopamine modulated cortical activation. *Neural Networks*, **2003**, 16, 973-84	9.1	17
32	Category learning deficits in Parkinson's disease. *Neuropsychology*, **2003**, 17, 115-24	3.8	48
31	A THURSTONE-COOMBS MODEL OF CONCURRENT RATINGS WITH SENSORY AND LIKING DIMENSIONS. *Journal of Sensory Studies*, **2002**, 17, 43-59	2.2	9
30	What makes a categorization task difficult?. *Perception & Psychophysics*, **2002**, 64, 570-83		17
29	Multiple attention systems in perceptual categorization. *Memory and Cognition*, **2002**, 30, 325-39	2.2	21
28	Single versus multiple systems of category learning: Reply to Nosofsky and Kruschke (2002). *Psychonomic Bulletin and Review*, **2002**, 9, 175-180	4.1	20

27	Observational versus feedback training in rule-based and information-integration category learning. *Memory and Cognition*, **2002**, 30, 666-77	2.2	164
26	11. The effects of positive affect and arousal on working memory and executive attention. *Advances in Consciousness Research*, **2002**, 245-287		72
25	Suboptimality in human categorization and identification. *Journal of Experimental Psychology: General*, **2001**, 130, 77-96	4.7	53
24	The effects of concurrent task interference on category learning: evidence for multiple category learning systems. *Psychonomic Bulletin and Review*, **2001**, 8, 168-76	4.1	202
23	The Neuropsychological Bases of Category Learning. *Current Directions in Psychological Science*, **2000**, 9, 10-14	6.5	20
22	On the dominance of unidimensional rules in unsupervised categorization. *Perception & Psychophysics*, **1999**, 61, 1178-99		155
21	On the nature of implicit categorization. *Psychonomic Bulletin and Review*, **1999**, 6, 363-78	4.1	147
20	A neuropsychological theory of positive affect and its influence on cognition. *Psychological Review*, **1999**, 106, 529-50	6.3	1560
19	Response time distributions in multidimensional perceptual categorization. *Perception & Psychophysics*, **1998**, 60, 620-37		36
18	A neuropsychological theory of multiple systems in category learning. *Psychological Review*, **1998**, 105, 442-81	6.3	966
17	A formal theory of feature binding in object perception. *Psychological Review*, **1996**, 103, 165-92	6.3	159
16	Resurrecting Information Theory. *American Journal of Psychology*, **1995**, 108, 609	0.5	2
15	A probabilistic multidimensional model of location information. *Psychological Research*, **1994**, 56, 66-77	2.5	12
14	Categorization response time with multidimensional stimuli. *Perception & Psychophysics*, **1994**, 55, 11-27		58
13	Comparing decision bound and exemplar models of categorization. *Perception & Psychophysics*, **1993**, 53, 49-70		339
12	The relative sensitivities of same-different and identification judgment models to perceptual dependence. *Psychometrika*, **1993**, 58, 257-279	2.2	12
11	Complex decision rules in categorization: Contrasting novice and experienced performance.. *Journal of Experimental Psychology: Human Perception and Performance*, **1992**, 18, 50-71	2.6	225
10	Subitizing: magical numbers or mere superstition?. *Psychological Research*, **1992**, 54, 80-90	2.5	75

9	Comparing the biased choice model and multidimensional decision bound models of identification. *Mathematical Social Sciences*, **1992**, 23, 175-197	0.7	6
8	Is subitizing a unique numerical ability?. *Perception & Psychophysics*, **1991**, 50, 555-64		55
7	Estimating the parameters of multidimensional signal detection theory from simultaneous ratings on separate stimulus components. *Perception & Psychophysics*, **1988**, 44, 195-204		36
6	Toward a unified theory of similarity and recognition.. *Psychological Review*, **1988**, 95, 124-150	6.3	254
5	Decision rules in the perception and categorization of multidimensional stimuli.. *Journal of Experimental Psychology: Learning Memory and Cognition*, **1988**, 14, 33-53	2.2	427
4	Varieties of perceptual independence.. *Psychological Review*, **1986**, 93, 154-179	6.3	731
3	Testing the assumptions of exponential, additive reaction time models. *Memory and Cognition*, **1982**, 10, 125-34	2.2	40
2	Perceptual sampling of orthogonal straight line features. *Psychological Research*, **1981**, 43, 259-75	2.5	35
1	A test of visual feature sampling independence with orthogonal straight lines. *Bulletin of the Psychonomic Society*, **1980**, 15, 163-166		15