Joshua I Gold

List of Publications by Year
in descending order

63	11,412	136740	118652
papers	citations	32 h-index	62 g-index

89	89	89	7745
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ethical Issues in Intraoperative Neuroscience Research: Assessing Subjectsâ€™ Recall of Informed Consent and Motivations for Participation. AJOB Empirical Bioethics, 2022, 13, 57-66.	0.8	11
2	Context-dependent relationships between locus coeruleus firing patterns and coordinated neural activity in the anterior cingulate cortex. ELife, 2022, 11, .	2.8	24
3	Human inference reflects a normative balance of complexity and accuracy. Nature Human Behaviour, 2022, 6, 1153-1168.	6.2	7
4	Embo: a Python package for empirical data analysis using the Information Bottleneck. Journal of Open Research Software, 2021, 9, 10.	2.7	2
5	Theta Synchrony Is Increased near Neural Populations That Are Active When Initiating Instructed Movement. ENeuro, 2021, 8, ENEURO.0252-20.2020.	0.9	7
6	Functional brain network reconfiguration during learning in a dynamic environment. Nature Communications, 2020, 11, 1682.	5.8	25
7	Pupil Size as a Window on Neural Substrates of Cognition. Trends in Cognitive Sciences, 2020, 24, 466-480.	4.0	304
8	The caudate nucleus contributes causally to decisions that balance reward and uncertain visual information. ELife, 2020, 9, .	2.8	41
9	Pupil diameter encodes the idiosyncratic, cognitive complexity of belief updating. ELife, 2020, 9, .	2.8	37
10	Neural encoding of task-dependent errors during adaptive learning. ELife, 2020, 9, .	2.8	5
11	Frontal eye field and caudate neurons make different contributions to reward-biased perceptual decisions. ELife, 2020, 9, .	2.8	12
12	The human as delta-rule learner.. Decision, 2020, 7, 55-66.	0.4	14
13	What is optimal in optimal inference?. Current Opinion in Behavioral Sciences, 2019, 29, 117-126.	2.0	9
14	Individual Neurons in the Cingulate Cortex Encode Action Monitoring, Not Selection, during Adaptive Decision-Making. Journal of Neuroscience, 2019, 39, 6668-6683.	1.7	23
15	Post-decision processing in primate prefrontal cortex influences subsequent choices on an auditory decision-making task. ELife, 2019, 8, .	2.8	32
16	A biasâ€“variance trade-off governs individual differences in on-line learning in an unpredictable environment. Nature Human Behaviour, 2018, 2, 213-224.	6.2	61
17	On the nature and use of models in network neuroscience. Nature Reviews Neuroscience, 2018, 19, 566-578.	4.9	277
18	Ongoing, rational calibration of reward-driven perceptual biases. ELife, 2018, 7, .	2.8	41

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19	Arousal-related adjustments of perceptual biases optimize perception in dynamic environments. Nature Human Behaviour, 2017, 1, .	6.2	67
20	Coupled Decision Processes Update and Maintain Saccadic Priors in a Dynamic Environment. Journal of Neuroscience, 2017, 37, 3632-3645.	1.7	38
21	Visual Decision-Making in an Uncertain and Dynamic World. Annual Review of Vision Science, 2017, 3, 227-250.	2.3	59
22	Positive affect, surprise, and fatigue are correlates of network flexibility. Scientific Reports, 2017, 7, 520.	1.6	140
23	Age differences in learning emerge from an insufficient representation of uncertainty in older adults. Nature Communications, 2016, 7, 11609.	5.8	70
24	Relationships between Pupil Diameter and Neuronal Activity in the Locus Coeruleus, Colliculi, and Cingulate Cortex. Neuron, 2016, 89, 221-234.	3.8	1,021
25	Causal contribution of primate auditory cortex to auditory perceptual decision-making. Nature Neuroscience, 2016, 19, 135-142.	7.1	97
26	Comment on â€œSingle-trial spike trains in parietal cortex reveal discrete steps during decision-makingâ€. Science, 2016, 351, 1406-1406.	6.0	26
27	Temporal trade-offs in psychophysics. Current Opinion in Neurobiology, 2016, 37, 121-125.	2.0	16
28	Temporal Integration of Auditory Information Is Invariant to Temporal Grouping Cues. ENeuro, 2015, 2, ENEURO.0077-14.2015.	0.9	12
29	Normative evidence accumulation in unpredictable environments. ELife, 2015, 4, .	2.8	147
30	Functionally Dissociable Influences on Learning Rate in a Dynamic Environment. Neuron, 2014, 84, 870-881.	3.8	216
31	Phasic Activation of Individual Neurons in the Locus Ceruleus/Subceruleus Complex of Monkeys Reflects Rewarded Decisions to Go But Not Stop. Journal of Neuroscience, 2014, 34, 13656-13669.	1.7	74
32	Neural Mechanisms for Perceptual Decision Making. , 2014, , 355-372.		8
33	The Basal Gangliaâ€™s Contributions to Perceptual Decision Making. Neuron, 2013, 79, 640-649.	3.8	149
34	How mechanisms of perceptual decision-making affect the psychometric function. Progress in Neurobiology, 2013, 103, 98-114.	2.8	85
35	Biased Associative Representations in Parietal Cortex. Neuron, 2013, 77, 180-191.	3.8	43
36	A Healthy Fear of the Unknown: Perspectives on the Interpretation of Parameter Fits from Computational Models in Neuroscience. PLoS Computational Biology, 2013, 9, e1003015.	1.5	21

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37	A Mixture of Delta-Rules Approximation to Bayesian Inference in Change-Point Problems. PLoS Computational Biology, 2013, 9, e1003150.	1.5	90
38	Neural Correlates of Perceptual Decision Making before, during, and after Decision Commitment in Monkey Frontal Eye Field. Cerebral Cortex, 2012, 22, 1052-1067.	1.6	213
39	Separate, Causal Roles of the Caudate in Saccadic Choice and Execution in a Perceptual Decision Task. Neuron, 2012, 75, 865-874.	3.8	106
40	Rational regulation of learning dynamics by pupil-linked arousal systems. Nature Neuroscience, 2012, 15, 1040-1046.	7.1	570
41	Using Our Brains to Develop Better Policy. Risk Analysis, 2012, 32, 374-380.	1.5	26
42	Distinct Representations of a Perceptual Decision and the Associated Oculomotor Plan in the Monkey Lateral Intraparietal Area. Journal of Neuroscience, 2011, 31, 913-921.	1.7	159
43	Perceptual learning. Current Biology, 2010, 20, R46-R48.	1.8	56
44	An Approximately Bayesian Delta-Rule Model Explains the Dynamics of Belief Updating in a Changing Environment. Journal of Neuroscience, 2010, 30, 12366-12378.	1.7	381
45	Caudate Encodes Multiple Computations for Perceptual Decisions. Journal of Neuroscience, 2010, 30, 15747-15759.	1.7	263
46	Relationships Between the Threshold and Slope of Psychometric and Neurometric Functions During Perceptual Learning: Implications for Neuronal Pooling. Journal of Neurophysiology, 2010, 103, 140-154.	0.9	27
47	Bayesian Online Learning of the Hazard Rate in Change-Point Problems. Neural Computation, 2010, 22, 2452-2476.	1.3	120
48	Shared Mechanisms of Perceptual Learning and Decision Making. Topics in Cognitive Science, 2010, 2, 226-238.	1.1	28
49	Correlates of Perceptual Learning in an Oculomotor Decision Variable. Journal of Neuroscience, 2009, 29, 2136-2150.	1.7	19
50	Reinforcement learning can account for associative and perceptual learning on a visual-decision task. Nature Neuroscience, 2009, 12, 655-663.	7.1	245
51	A method for localizing microelectrode trajectories in the macaque brain using MRI. Journal of Neuroscience Methods, 2009, 176, 104-111.	1.3	25
52	Neural correlates of perceptual learning in a sensory-motor, but not a sensory, cortical area. Nature Neuroscience, 2008, 11, 505-513.	7.1	436
53	The Relative Influences of Priors and Sensory Evidence on an Oculomotor Decision Variable During Perceptual Learning. Journal of Neurophysiology, 2008, 100, 2653-2668.	0.9	103
54	The Neural Basis of Decision Making. Annual Review of Neuroscience, 2007, 30, 535-574.	5.0	3,157

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55	Through the Looking Glass. Focus on â€œRepresentation of an Abstract Perceptual Decision in Macaque Superior Colliculusâ€. Journal of Neurophysiology, 2004, 91, 1936-1937.	0.9	1
56	Context Matters. Neuron, 2004, 41, 177-178.	3.8	0
57	Linking reward expectation to behavior in the basal ganglia. Trends in Neurosciences, 2003, 26, 12-14.	4.2	35
58	The Influence of Behavioral Context on the Representation of a Perceptual Decision in Developing Oculomotor Commands. Journal of Neuroscience, 2003, 23, 632-651.	1.7	249
59	Good Vibrations. Neuron, 2002, 33, 842-844.	3.8	1
60	Banburismus and the Brain. Neuron, 2002, 36, 299-308.	3.8	494
61	Neural computations that underlie decisions about sensory stimuli. Trends in Cognitive Sciences, 2001, 5, 10-16.	4.0	808
62	Representation of a perceptual decision in developing oculomotor commands. Nature, 2000, 404, 390-394.	13.7	539
63	Multiple Roles of Experience in Decoding the Neural Representation of Sensory Stimuli. Novartis Foundation Symposium, 0, , 92-107.	1.2	2