# Yael Niv

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 100 papers | 9,746 citations | 45 h-index | 98 g-index |
| 124 ext. papers | 12,137 ext. citations | 9.5 avg, IF | 6.93 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 100 | Minimal cross-trial generalization in learning the representation of an odor-guided choice task.. *PLoS Computational Biology*, **2022**, 18, e1009897 | 5 | |
| 99 | A practical guide for studying human behavior in the lab.. *Behavior Research Methods*, **2022**, 1 | 6.1 | 0 |
| 98 | A recurring reproduction error in the administration of the Generalized Anxiety Disorder scale. *Lancet Psychiatry,the*, **2021**, 8, 180-181 | 23.3 | 1 |
| 97 | Biased evaluations emerge from inferring hidden causes. *Nature Human Behaviour*, **2021**, 5, 1180-1189 | 12.8 | 4 |
| 96 | The case against economic values in the orbitofrontal cortex (or anywhere else in the brain). *Behavioral Neuroscience*, **2021**, 135, 192-201 | 2.1 | 17 |
| 95 | Human Representation Learning. *Annual Review of Neuroscience*, **2021**, 44, 253-273 | 17 | 2 |
| 94 | Signed and unsigned reward prediction errors dynamically enhance learning and memory. *ELife*, **2021**, 10, | 8.9 | 8 |
| 93 | Orbitofrontal cortex and learning predictions of state transitions. *Behavioral Neuroscience*, **2021**, 135, 487-497 | 2.1 | 0 |
| 92 | A model of mood as integrated advantage. *Psychological Review*, **2021**, | 6.3 | 6 |
| 91 | Value-free reinforcement learning: policy optimization as a minimal model of operant behavior. *Current Opinion in Behavioral Sciences*, **2021**, 41, 114-121 | 4 | 1 |
| 90 | The primacy of behavioral research for understanding the brain. *Behavioral Neuroscience*, **2021**, 135, 601-609 | 2.1 | 17 |
| 89 | A pupillary index of susceptibility to decision biases. *Nature Human Behaviour*, **2021**, 5, 653-662 | 12.8 | 1 |
| 88 | Reward prediction errors create event boundaries in memory. *Cognition*, **2020**, 203, 104269 | 3.5 | 21 |
| 87 | Dopamine transients do not act as model-free prediction errors during associative learning. *Nature Communications*, **2020**, 11, 106 | 17.4 | 22 |
| 86 | Intact Reinforcement Learning But Impaired Attentional Control During Multidimensional Probabilistic Learning in Older Adults. *Journal of Neuroscience*, **2020**, 40, 1084-1096 | 6.6 | 7 |
| 85 | Model-based decision making and model-free learning. *Current Biology*, **2020**, 30, R860-R865 | 6.3 | 11 |
| 84 | Complementary Task Structure Representations in Hippocampus and Orbitofrontal Cortex during an Odor Sequence Task. *Current Biology*, **2019**, 29, 3402-3409.e3 | 6.3 | 20 |

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| 83 | Learning task-state representations. *Nature Neuroscience*, **2019**, 22, 1544-1553 | 25.5 | 82 |
| 82 | Representational structure or task structure? Bias in neural representational similarity analysis and a Bayesian method for reducing bias. *PLoS Computational Biology*, **2019**, 15, e1006299 | 5 | 20 |
| 81 | Neural Signatures of Prediction Errors in a Decision-Making Task Are Modulated by Action Execution Failures. *Current Biology*, **2019**, 29, 1606-1613.e5 | 6.3 | 9 |
| 80 | The Two Cultures of Computational Psychiatry. *JAMA Psychiatry*, **2019**, 76, 563-564 | 14.5 | 21 |
| 79 | State representation in mental illness. *Current Opinion in Neurobiology*, **2019**, 55, 160-166 | 7.6 | 3 |
| 78 | Rat Orbitofrontal Ensemble Activity Contains Multiplexed but Dissociable Representations of Value and Task Structure in an Odor Sequence Task. *Current Biology*, **2019**, 29, 897-907.e3 | 6.3 | 34 |
| 77 | Uncovering the State: Tracing the hidden state representations that structure learning and decision-making. *Behavioural Processes*, **2019**, 167, 103891 | 1.6 | 5 |
| 76 | Depressive symptoms bias the prediction-error enhancement of memory towards negative events in reinforcement learning. *Psychopharmacology*, **2019**, 236, 2425-2435 | 4.7 | 13 |
| 75 | Sequential replay of nonspatial task states in the human hippocampus. *Science*, **2019**, 364, | 33.3 | 93 |
| 74 | Holistic Reinforcement Learning: The Role of Structure and Attention. *Trends in Cognitive Sciences*, **2019**, 23, 278-292 | 14 | 39 |
| 73 | An Integrated Model of Action Selection: Distinct Modes of Cortical Control of Striatal Decision Making. *Annual Review of Psychology*, **2019**, 70, 53-76 | 26.1 | 42 |
| 72 | Model-based predictions for dopamine. *Current Opinion in Neurobiology*, **2018**, 49, 1-7 | 7.6 | 70 |
| 71 | Dissociable effects of surprising rewards on learning and memory. *Journal of Experimental Psychology: Learning Memory and Cognition*, **2018**, 44, 1430-1443 | 2.2 | 47 |
| 70 | A State Representation for Reinforcement Learning and Decision-Making in the Orbitofrontal Cortex **2018**, 259-278 | | 16 |
| 69 | Dynamic Interaction between Reinforcement Learning and Attention in Multidimensional Environments. *Neuron*, **2017**, 93, 451-463 | 13.9 | 143 |
| 68 | Computational approaches to fMRI analysis. *Nature Neuroscience*, **2017**, 20, 304-313 | 25.5 | 126 |
| 67 | Dopamine transients are sufficient and necessary for acquisition of model-based associations. *Nature Neuroscience*, **2017**, 20, 735-742 | 25.5 | 132 |
| 66 | Does mental context drift or shift?. *Current Opinion in Behavioral Sciences*, **2017**, 17, 141-146 | 4 | 45 |

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| 65 | Lateral Hypothalamic GABAergic Neurons Encode Reward Predictions that Are Relayed to the Ventral Tegmental Area to Regulate Learning. *Current Biology*, **2017**, 27, 2089-2100.e5 | 6.3 | 65 |
| 64 | Reconsolidation-Extinction Interactions in Fear Memory Attenuation: The Role of Inter-Trial Interval Variability. *Frontiers in Behavioral Neuroscience*, **2017**, 11, 2 | 3.5 | 6 |
| 63 | The computational nature of memory modification. *ELife*, **2017**, 6, | 8.9 | 51 |
| 62 | Author response: The computational nature of memory modification **2017**, | | 2 |
| 61 | Feature-based reward learning biases dimensional attention. *Journal of Vision*, **2017**, 17, 1297 | 0.4 | |
| 60 | Should you trust your RSA result? A Bayesian method for reducing bias in neural representational similarity analysis.. *Journal of Vision*, **2017**, 17, 571 | 0.4 | |
| 59 | Predicting trial-by-trial attention dynamics during human reinforcement learning. *Journal of Vision*, **2017**, 17, 1098 | 0.4 | |
| 58 | Human Orbitofrontal Cortex Represents a Cognitive Map of State Space. *Neuron*, **2016**, 91, 1402-1412 | 13.9 | 240 |
| 57 | Do You See the Forest or the Tree? Neural Gain and Breadth Versus Focus in Perceptual Processing. *Psychological Science*, **2016**, 27, 1632-1643 | 7.9 | 25 |
| 56 | The effects of aging on the interaction between reinforcement learning and attention. *Psychology and Aging*, **2016**, 31, 747-757 | 3.6 | 12 |
| 55 | Temporal Specificity of Reward Prediction Errors Signaled by Putative Dopamine Neurons in Rat VTA Depends on Ventral Striatum. *Neuron*, **2016**, 91, 182-93 | 13.9 | 66 |
| 54 | Mood as Representation of Momentum. *Trends in Cognitive Sciences*, **2016**, 20, 15-24 | 14 | 128 |
| 53 | DYT1 dystonia increases risk taking in humans. *ELife*, **2016**, 5, | 8.9 | 9 |
| 52 | Amplified selectivity in cognitive processing implements the neural gain model of norepinephrine function. *Behavioral and Brain Sciences*, **2016**, 39, e206 | 0.9 | 5 |
| 51 | Reinforcement learning with Marr. *Current Opinion in Behavioral Sciences*, **2016**, 11, 67-73 | 4 | 22 |
| 50 | A Probability Distribution over Latent Causes, in the Orbitofrontal Cortex. *Journal of Neuroscience*, **2016**, 36, 7817-28 | 6.6 | 44 |
| 49 | Discovering latent causes in reinforcement learning. *Current Opinion in Behavioral Sciences*, **2015**, 5, 43-50 | 4 | 72 |
| 48 | Rethinking Extinction. *Neuron*, **2015**, 88, 47-63 | 13.9 | 157 |

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|---|---|---|---|
| 47 | Novelty and Inductive Generalization in Human Reinforcement Learning. *Topics in Cognitive Science*, **2015**, 7, 391-415 | 2.5 | 42 |
| 46 | How to divide and conquer the world, one step at a time. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2929-30 | 11.5 | 4 |
| 45 | Reinforcement learning in multidimensional environments relies on attention mechanisms. *Journal of Neuroscience*, **2015**, 35, 8145-57 | 6.6 | 186 |
| 44 | The State of the Orbitofrontal Cortex. *Neuron*, **2015**, 88, 1075-1077 | 13.9 | 12 |
| 43 | A free-choice premium in the basal ganglia. *Trends in Cognitive Sciences*, **2015**, 19, 4-5 | 14 | 3 |
| 42 | Interaction between emotional state and learning underlies mood instability. *Nature Communications*, **2015**, 6, 6149 | 17.4 | 75 |
| 41 | Is Model Fitting Necessary for Model-Based fMRI?. *PLoS Computational Biology*, **2015**, 11, e1004237 | 5 | 50 |
| 40 | Orbitofrontal cortex as a cognitive map of task space. *Neuron*, **2014**, 81, 267-279 | 13.9 | 479 |
| 39 | Causal Model Comparison Shows That Human Representation Learning Is Not Bayesian. *Cold Spring Harbor Symposia on Quantitative Biology*, **2014**, 79, 161-8 | 3.9 | 6 |
| 38 | Optimal behavioral hierarchy. *PLoS Computational Biology*, **2014**, 10, e1003779 | 5 | 60 |
| 37 | Explaining compound generalization in associative and causal learning through rational principles of dimensional generalization. *Psychological Review*, **2014**, 121, 526-58 | 6.3 | 46 |
| 36 | Statistical computations underlying the dynamics of memory updating. *PLoS Computational Biology*, **2014**, 10, e1003939 | 5 | 45 |
| 35 | How did the chicken cross the road? With her striatal cholinergic interneurons, of course. *Neuron*, **2013**, 79, 3-6 | 13.9 | 14 |
| 34 | Neural and psychological maturation of decision-making in adolescence and young adulthood. *Journal of Cognitive Neuroscience*, **2013**, 25, 1807-23 | 3.1 | 73 |
| 33 | Hierarchical learning induces two simultaneous, but separable, prediction errors in human basal ganglia. *Journal of Neuroscience*, **2013**, 33, 5797-805 | 6.6 | 57 |
| 32 | The effects of neural gain on attention and learning. *Nature Neuroscience*, **2013**, 16, 1146-53 | 25.5 | 271 |
| 31 | Perceptual estimation obeys Occam's razor. *Frontiers in Psychology*, **2013**, 4, 623 | 3.4 | 26 |
| 30 | Gradual extinction prevents the return of fear: implications for the discovery of state. *Frontiers in Behavioral Neuroscience*, **2013**, 7, 164 | 3.5 | 71 |

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|---|---|---|---|
| 29 | Exploring a latent cause theory of classical conditioning. *Learning and Behavior*, **2012**, 40, 255-68 | 1.3 | 74 |
| 28 | The impact of orbitofrontal dysfunction on cocaine addiction. *Nature Neuroscience*, **2012**, 15, 358-66 | 25.5 | 152 |
| 27 | Neural prediction errors reveal a risk-sensitive reinforcement-learning process in the human brain. *Journal of Neuroscience*, **2012**, 32, 551-62 | 6.6 | 191 |
| 26 | Inferring relevance in a changing world. *Frontiers in Human Neuroscience*, **2011**, 5, 189 | 3.3 | 83 |
| 25 | Expectancy-related changes in firing of dopamine neurons depend on orbitofrontal cortex. *Nature Neuroscience*, **2011**, 14, 1590-7 | 25.5 | 193 |
| 24 | A neural signature of hierarchical reinforcement learning. *Neuron*, **2011**, 71, 370-9 | 13.9 | 126 |
| 23 | The effects of motivation on response rate: a hidden semi-Markov model analysis of behavioral dynamics. *Journal of Neuroscience Methods*, **2011**, 201, 251-61 | 3 | 12 |
| 22 | Ventral striatum and orbitofrontal cortex are both required for model-based, but not model-free, reinforcement learning. *Journal of Neuroscience*, **2011**, 31, 2700-5 | 6.6 | 171 |
| 21 | Context, learning, and extinction. *Psychological Review*, **2010**, 117, 197-209 | 6.3 | 203 |
| 20 | Learning latent structure: carving nature at its joints. *Current Opinion in Neurobiology*, **2010**, 20, 251-6 | 7.6 | 160 |
| 19 | Hierarchically organized behavior and its neural foundations: a reinforcement learning perspective. *Cognition*, **2009**, 113, 262-280 | 3.5 | 356 |
| 18 | Reinforcement learning in the brain. *Journal of Mathematical Psychology*, **2009**, 53, 139-154 | 1.2 | 368 |
| 17 | Reinforcement learning: the good, the bad and the ugly. *Current Opinion in Neurobiology*, **2008**, 18, 185-96 | 7.6 | 592 |
| 16 | Dialogues on prediction errors. *Trends in Cognitive Sciences*, **2008**, 12, 265-72 | 14 | 253 |
| 15 | From fear to safety and back: reversal of fear in the human brain. *Journal of Neuroscience*, **2008**, 28, 11517-25 | 6.6 | 356 |
| 14 | Cost, benefit, tonic, phasic: what do response rates tell us about dopamine and motivation?. *Annals of the New York Academy of Sciences*, **2007**, 1104, 357-76 | 6.5 | 106 |
| 13 | Tonic dopamine: opportunity costs and the control of response vigor. *Psychopharmacology*, **2007**, 191, 507-20 | 4.7 | 765 |
| 12 | Parkinson's disease: fighting the will?. *Journal of Neuroscience*, **2007**, 27, 11777-9 | 6.6 | 14 |

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|---|---|---|---|
| 11 | A normative perspective on motivation. *Trends in Cognitive Sciences*, **2006**, 10, 375-81 | 14 | 234 |
| 10 | Uncertainty-based competition between prefrontal and dorsolateral striatal systems for behavioral control. *Nature Neuroscience*, **2005**, 8, 1704-11 | 25.5 | 1688 |
| 9 | The case against economic values in the orbitofrontal cortex (or anywhere else in the brain) | | 5 |
| 8 | A model of mood as integrated advantage | | 4 |
| 7 | The primacy of behavioral research for understanding the brain | | 7 |
| 6 | Representational structure or task structure? Bias in neural representational similarity analysis and a Bayesian method for reducing bias | | 1 |
| 5 | Rumination Derails Reinforcement Learning With Possible Implications for Ineffective Behavior. *Clinical Psychological Science*,216770262110513 | 6 | 1 |
| 4 | The Computational Nature of Memory Modification | | 1 |
| 3 | A Bayesian method for reducing bias in neural representational similarity analysis | | 13 |
| 2 | A State Representation for Reinforcement Learning and Decision-Making in the Orbitofrontal Cortex | | 3 |
| 1 | Dopamine transients delivered in learning contexts do not act as model-free prediction errors | | 3 |