

Etienne Koechlin

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

11,102
citations

81900

39
h-index

189892

50
g-index

61
all docs

61
docs citations

61
times ranked

9683
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational models of adaptive behavior and prefrontal cortex. <i>Neuropsychopharmacology</i> , 2022, 47, 58-71.	5.4	30
2	Imprecise neural computations as a source of adaptive behaviour in volatile environments. <i>Nature Human Behaviour</i> , 2021, 5, 99-112.	12.0	20
3	Additively Combining Utilities and Beliefs: Research Gaps and Algorithmic Developments. <i>Frontiers in Neuroscience</i> , 2021, 15, 704728.	2.8	0
4	Human Decision-Making beyond the Rational Decision Theory. <i>Trends in Cognitive Sciences</i> , 2020, 24, 4-6.	7.8	18
5	Neural mechanisms resolving exploitation-exploration dilemmas in the medial prefrontal cortex. <i>Science</i> , 2020, 369, .	12.6	73
6	Temporal chunking as a mechanism for unsupervised learning of task-sets. <i>ELife</i> , 2020, 9, .	6.0	14
7	Prefrontal mechanisms combining rewards and beliefs in human decision-making. <i>Nature Communications</i> , 2019, 10, 301.	12.8	36
8	The Neuro-Computational Architecture of Value-Based Selection in the Human Brain. <i>Cerebral Cortex</i> , 2018, 28, 585-601.	2.9	40
9	Prefrontal function and cognitive control: from action to language. <i>Current Opinion in Behavioral Sciences</i> , 2018, 21, 106-111.	3.9	23
10	The Importance of Falsification in Computational Cognitive Modeling. <i>Trends in Cognitive Sciences</i> , 2017, 21, 425-433.	7.8	288
11	Neural coding of prior expectations in hierarchical intention inference. <i>Scientific Reports</i> , 2017, 7, 1278.	3.3	28
12	Managing competing goals " a key role for the frontopolar cortex. <i>Nature Reviews Neuroscience</i> , 2017, 18, 645-657.	10.2	208
13	Rewards and Cognitive Control in the Human Prefrontal Cortex. <i>Cerebral Cortex</i> , 2017, 27, 5024-5039.	2.9	54
14	Computational Precision of Mental Inference as Critical Source of Human Choice Suboptimality. <i>Neuron</i> , 2016, 92, 1398-1411.	8.1	107
15	Choice variability and suboptimality in uncertain environments. <i>Current Opinion in Behavioral Sciences</i> , 2016, 11, 109-115.	3.9	77
16	Prefrontal executive function and adaptive behavior in complex environments. <i>Current Opinion in Neurobiology</i> , 2016, 37, 1-6.	4.2	119
17	Executive control and decision-making in the prefrontal cortex. <i>Current Opinion in Behavioral Sciences</i> , 2015, 1, 101-106.	3.9	157
18	Foundations of human reasoning in the prefrontal cortex. <i>Science</i> , 2014, 344, 1481-1486.	12.6	345

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19	An evolutionary computational theory of prefrontal executive function in decision-making. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20130474.	4.0	54
20	Testing the model of caudo-rostral organization of cognitive control in the human with frontal lesions. <i>NeuroImage</i> , 2014, 84, 1053-1060.	4.2	76
21	Motivation, Control, and Human Prefrontal Executive Function. , 2013, , 279-291.		1
22	Introduction to Section IV: Cognitive Neuroscience. , 2013, , 275-278.		0
23	Reasoning, Learning, and Creativity: Frontal Lobe Function and Human Decision-Making. <i>PLoS Biology</i> , 2012, 10, e1001293.	5.6	368
24	Impaired Hierarchical Control Within the Lateral Prefrontal Cortex in Schizophrenia. <i>Biological Psychiatry</i> , 2011, 70, 73-80.	1.3	25
25	Frontal pole function: what is specifically human?. <i>Trends in Cognitive Sciences</i> , 2011, 15, 241.	7.8	87
26	Perceptual Classification in a Rapidly Changing Environment. <i>Neuron</i> , 2011, 71, 725-736.	8.1	70
27	What Are They Up To? The Role of Sensory Evidence and Prior Knowledge in Action Understanding. <i>PLoS ONE</i> , 2011, 6, e17133.	2.5	50
28	Economic Value Biases Uncertain Perceptual Choices in the Parietal and Prefrontal Cortices. <i>Frontiers in Human Neuroscience</i> , 2010, 4, 208.	2.0	67
29	Divided Representation of Concurrent Goals in the Human Frontal Lobes. <i>Science</i> , 2010, 328, 360-363.	12.6	138
30	Organization of Cognitive Control Within the Lateral Prefrontal Cortex in Schizophrenia. <i>Archives of General Psychiatry</i> , 2009, 66, 377.	12.3	67
31	Two Mechanisms for Task Switching in the Prefrontal Cortex. <i>Journal of Neuroscience</i> , 2009, 29, 5135-5142.	3.6	137
32	Motivation and cognitive control in the human prefrontal cortex. <i>Nature Neuroscience</i> , 2009, 12, 939-945.	14.8	511
33	203 "How cognitive control is implemented in the prefrontal cortex of patients with schizophrenia. <i>Schizophrenia Research</i> , 2008, 98, 117.	2.0	0
34	A Neural Representation of Prior Information during Perceptual Inference. <i>Neuron</i> , 2008, 59, 336-347.	8.1	288
35	The architecture of cognitive control in schizophrenia. <i>Brain</i> , 2008, 131, 962-970.	7.6	39
36	Damage to the Fronto-Polar Cortex Is Associated with Impaired Multitasking. <i>PLoS ONE</i> , 2008, 3, e3227.	2.5	93

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37	An information theoretical approach to prefrontal executive function. Trends in Cognitive Sciences, 2007, 11, 229-235.	7.8	893
38	Serial Organization of Human Behavior in the Inferior Parietal Cortex. Journal of Neuroscience, 2007, 27, 11028-11036.	3.6	42
39	Anterior Prefrontal Function and the Limits of Human Decision-Making. Science, 2007, 318, 594-598.	12.6	656
40	Broca's Area and the Hierarchical Organization of Human Behavior. Neuron, 2006, 50, 963-974.	8.1	463
41	Predictive Codes for Forthcoming Perception in the Frontal Cortex. Science, 2006, 314, 1311-1314.	12.6	480
42	The Architecture of Cognitive Control in the Human Prefrontal Cortex. Science, 2003, 302, 1181-1185.	12.6	1,548
43	The Roles of Timing and Task Order during Task Switching. NeuroImage, 2002, 17, 95-109.	4.2	147
44	Medial Prefrontal and Subcortical Mechanisms Underlying the Acquisition of Motor and Cognitive Action Sequences in Humans. Neuron, 2002, 35, 371-381.	8.1	77
45	Differential amygdala responses to winning and losing: a functional magnetic resonance imaging study in humans. European Journal of Neuroscience, 2000, 12, 1764-1770.	2.6	121
46	Dissociating the role of the medial and lateral anterior prefrontal cortex in human planning. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 7651-7656.	7.1	270
47	The role of the anterior prefrontal cortex in human cognition. Nature, 1999, 399, 148-151.	27.8	989
48	Parieto-frontal coding of reaching: an integrated framework. Experimental Brain Research, 1999, 129, 0325-0346.	1.5	192
49	Bayesian inference in populations of cortical neurons: a model of motion integration and segmentation in area MT. Biological Cybernetics, 1999, 80, 25-44.	1.3	48
50	Primed numbers: Exploring the modularity of numerical representations with masked and unmasked semantic priming.. Journal of Experimental Psychology: Human Perception and Performance, 1999, 25, 1882-1905.	0.9	177
51	Imaging unconscious semantic priming. Nature, 1998, 395, 597-600.	27.8	1,100
52	Numerical Transformations in Five-month-old Human Infants. Mathematical Cognition, 1997, 3, 89-104.	0.4	143
53	Dual Population Coding in the Neocortex: A Model of Interaction between Representation and Attention in the Visual Cortex. Journal of Cognitive Neuroscience, 1996, 8, 353-370.	2.3	11
54	Dynamical computational properties of local cortical networks for visual and motor processing: A bayesian framework. Journal of Physiology (Paris), 1996, 90, 257-262.	2.1	5

#	ARTICLE	IF	CITATIONS
55	The cognitive architecture of the human lateral prefrontal cortex. , 1993, , 482-509.		2