

Etienne Koechlin

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

11,102
citations

81743

39
h-index

189595

50
g-index

61
all docs

61
docs citations

61
times ranked

9683
citing authors

#	ARTICLE	IF	CITATIONS
1	The Architecture of Cognitive Control in the Human Prefrontal Cortex. <i>Science</i> , 2003, 302, 1181-1185.	6.0	1,548
2	Imaging unconscious semantic priming. <i>Nature</i> , 1998, 395, 597-600.	13.7	1,100
3	The role of the anterior prefrontal cortex in human cognition. <i>Nature</i> , 1999, 399, 148-151.	13.7	989
4	An information theoretical approach to prefrontal executive function. <i>Trends in Cognitive Sciences</i> , 2007, 11, 229-235.	4.0	893
5	Anterior Prefrontal Function and the Limits of Human Decision-Making. <i>Science</i> , 2007, 318, 594-598.	6.0	656
6	Motivation and cognitive control in the human prefrontal cortex. <i>Nature Neuroscience</i> , 2009, 12, 939-945.	7.1	511
7	Predictive Codes for Forthcoming Perception in the Frontal Cortex. <i>Science</i> , 2006, 314, 1311-1314.	6.0	480
8	Broca's Area and the Hierarchical Organization of Human Behavior. <i>Neuron</i> , 2006, 50, 963-974.	3.8	463
9	Reasoning, Learning, and Creativity: Frontal Lobe Function and Human Decision-Making. <i>PLoS Biology</i> , 2012, 10, e1001293.	2.6	368
10	Foundations of human reasoning in the prefrontal cortex. <i>Science</i> , 2014, 344, 1481-1486.	6.0	345
11	A Neural Representation of Prior Information during Perceptual Inference. <i>Neuron</i> , 2008, 59, 336-347.	3.8	288
12	The Importance of Falsification in Computational Cognitive Modeling. <i>Trends in Cognitive Sciences</i> , 2017, 21, 425-433.	4.0	288
13	Dissociating the role of the medial and lateral anterior prefrontal cortex in human planning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 7651-7656.	3.3	270
14	Managing competing goals – a key role for the frontopolar cortex. <i>Nature Reviews Neuroscience</i> , 2017, 18, 645-657.	4.9	208
15	Parieto-frontal coding of reaching: an integrated framework. <i>Experimental Brain Research</i> , 1999, 129, 0325-0346.	0.7	192
16	Primed numbers: Exploring the modularity of numerical representations with masked and unmasked semantic priming.. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 1999, 25, 1882-1905.	0.7	177
17	Executive control and decision-making in the prefrontal cortex. <i>Current Opinion in Behavioral Sciences</i> , 2015, 1, 101-106.	2.0	157
18	The Roles of Timing and Task Order during Task Switching. <i>NeuroImage</i> , 2002, 17, 95-109.	2.1	147

#	ARTICLE	IF	CITATIONS
19	Numerical Transformations in Five-month-old Human Infants. <i>Mathematical Cognition</i> , 1997, 3, 89-104.	0.4	143
20	Divided Representation of Concurrent Goals in the Human Frontal Lobes. <i>Science</i> , 2010, 328, 360-363.	6.0	138
21	Two Mechanisms for Task Switching in the Prefrontal Cortex. <i>Journal of Neuroscience</i> , 2009, 29, 5135-5142.	1.7	137
22	Differential amygdala responses to winning and losing: a functional magnetic resonance imaging study in humans. <i>European Journal of Neuroscience</i> , 2000, 12, 1764-1770.	1.2	121
23	Prefrontal executive function and adaptive behavior in complex environments. <i>Current Opinion in Neurobiology</i> , 2016, 37, 1-6.	2.0	119
24	Computational Precision of Mental Inference as Critical Source of Human Choice Suboptimality. <i>Neuron</i> , 2016, 92, 1398-1411.	3.8	107
25	Damage to the Fronto-Polar Cortex Is Associated with Impaired Multitasking. <i>PLoS ONE</i> , 2008, 3, e3227.	1.1	93
26	Frontal pole function: what is specifically human?. <i>Trends in Cognitive Sciences</i> , 2011, 15, 241.	4.0	87
27	Medial Prefrontal and Subcortical Mechanisms Underlying the Acquisition of Motor and Cognitive Action Sequences in Humans. <i>Neuron</i> , 2002, 35, 371-381.	3.8	77
28	Choice variability and suboptimality in uncertain environments. <i>Current Opinion in Behavioral Sciences</i> , 2016, 11, 109-115.	2.0	77
29	Testing the model of caudo-rostral organization of cognitive control in the human with frontal lesions. <i>NeuroImage</i> , 2014, 84, 1053-1060.	2.1	76
30	Neural mechanisms resolving exploitation-exploration dilemmas in the medial prefrontal cortex. <i>Science</i> , 2020, 369, .	6.0	73
31	Perceptual Classification in a Rapidly Changing Environment. <i>Neuron</i> , 2011, 71, 725-736.	3.8	70
32	Organization of Cognitive Control Within the Lateral Prefrontal Cortex in Schizophrenia. <i>Archives of General Psychiatry</i> , 2009, 66, 377.	13.8	67
33	Economic Value Biases Uncertain Perceptual Choices in the Parietal and Prefrontal Cortices. <i>Frontiers in Human Neuroscience</i> , 2010, 4, 208.	1.0	67
34	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.	1.8	54
35	Rewards and Cognitive Control in the Human Prefrontal Cortex. <i>Cerebral Cortex</i> , 2017, 27, 5024-5039.	1.6	54
36	What Are They Up To? The Role of Sensory Evidence and Prior Knowledge in Action Understanding. <i>PLoS ONE</i> , 2011, 6, e17133.	1.1	50

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37	Bayesian inference in populations of cortical neurons: a model of motion integration and segmentation in area MT. <i>Biological Cybernetics</i> , 1999, 80, 25-44.	0.6	48
38	Serial Organization of Human Behavior in the Inferior Parietal Cortex. <i>Journal of Neuroscience</i> , 2007, 27, 11028-11036.	1.7	42
39	The Neuro-Computational Architecture of Value-Based Selection in the Human Brain. <i>Cerebral Cortex</i> , 2018, 28, 585-601.	1.6	40
40	The architecture of cognitive control in schizophrenia. <i>Brain</i> , 2008, 131, 962-970.	3.7	39
41	Prefrontal mechanisms combining rewards and beliefs in human decision-making. <i>Nature Communications</i> , 2019, 10, 301.	5.8	36
42	Computational models of adaptive behavior and prefrontal cortex. <i>Neuropsychopharmacology</i> , 2022, 47, 58-71.	2.8	30
43	Neural coding of prior expectations in hierarchical intention inference. <i>Scientific Reports</i> , 2017, 7, 1278.	1.6	28
44	Impaired Hierarchical Control Within the Lateral Prefrontal Cortex in Schizophrenia. <i>Biological Psychiatry</i> , 2011, 70, 73-80.	0.7	25
45	Prefrontal function and cognitive control: from action to language. <i>Current Opinion in Behavioral Sciences</i> , 2018, 21, 106-111.	2.0	23
46	Imprecise neural computations as a source of adaptive behaviour in volatile environments. <i>Nature Human Behaviour</i> , 2021, 5, 99-112.	6.2	20
47	Human Decision-Making beyond the Rational Decision Theory. <i>Trends in Cognitive Sciences</i> , 2020, 24, 4-6.	4.0	18
48	Temporal chunking as a mechanism for unsupervised learning of task-sets. <i>ELife</i> , 2020, 9, .	2.8	14
49	Dual Population Coding in the Neocortex: A Model of Interaction between Representation and Attention in the Visual Cortex. <i>Journal of Cognitive Neuroscience</i> , 1996, 8, 353-370.	1.1	11
50	Dynamical computational properties of local cortical networks for visual and motor processing: A bayesian framework. <i>Journal of Physiology (Paris)</i> , 1996, 90, 257-262.	2.1	5
51	The cognitive architecture of the human lateral prefrontal cortex. , 1993, , 482-509.		2
52	Motivation, Control, and Human Prefrontal Executive Function. , 2013, , 279-291.		1
53	203 "How cognitive control is implemented in the prefrontal cortex of patients with schizophrenia. <i>Schizophrenia Research</i> , 2008, 98, 117.	1.1	0
54	Additively Combining Utilities and Beliefs: Research Gaps and Algorithmic Developments. <i>Frontiers in Neuroscience</i> , 2021, 15, 704728.	1.4	0

#	ARTICLE	IF	CITATIONS
55	Introduction to Section IV: Cognitive Neuroscience. , 2013, , 275-278.		0