

Christoph D Mathys

List of Publications by Year in descending order

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Version: 2024-02-01

62
papers

5,498
citations

159585

30
h-index

168389

53
g-index

79
all docs

79
docs citations

79
times ranked

4155
citing authors

#	ARTICLE	IF	CITATIONS
1	A generative framework for the study of delusions. <i>Schizophrenia Research</i> , 2022, 245, 42-49.	2.0	12
2	Conditioned Hallucinations and Prior Overweighting Are State-Sensitive Markers of Hallucination Susceptibility. <i>Biological Psychiatry</i> , 2022, 92, 772-780.	1.3	16
3	Cholinergic and dopaminergic effects on prediction error and uncertainty responses during sensory associative learning. <i>NeuroImage</i> , 2021, 226, 117590.	4.2	31
4	Updating beliefs beyond the here-and-now: the counter-factual self in anosognosia for hemiplegia. <i>Brain Communications</i> , 2021, 3, fcab098.	3.3	11
5	TAPAS: An Open-Source Software Package for Translational Neuromodeling and Computational Psychiatry. <i>Frontiers in Psychiatry</i> , 2021, 12, 680811.	2.6	69
6	The Switching Hierarchical Gaussian Filter. , 2021, , .		2
7	Moral dilemmas and trust in leaders during a global health crisis. <i>Nature Human Behaviour</i> , 2021, 5, 1074-1088.	12.0	27
8	Paranoia and belief updating during the COVID-19 crisis. <i>Nature Human Behaviour</i> , 2021, 5, 1190-1202.	12.0	59
9	Volatility Estimates Increase Choice Switching and Relate to Prefrontal Activity in Schizophrenia. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2020, 5, 173-183.	1.5	32
10	Aberrant computational mechanisms of social learning and decision-making in schizophrenia and borderline personality disorder. <i>PLoS Computational Biology</i> , 2020, 16, e1008162.	3.2	33
11	T64. LINKING SUBCLINICAL PERSECUTORY IDEATION TO INFLEXIBLE SOCIAL INFERENCE UNDER UNCERTAINTY. <i>Schizophrenia Bulletin</i> , 2020, 46, S255-S256.	4.3	0
12	Ketamine Affects Prediction Errors about Statistical Regularities: A Computational Single-Trial Analysis of the Mismatch Negativity. <i>Journal of Neuroscience</i> , 2020, 40, 5658-5668.	3.6	44
13	Atypical processing of uncertainty in individuals at risk for psychosis. <i>NeuroImage: Clinical</i> , 2020, 26, 102239.	2.7	37
14	Variability in Action Selection Relates to Striatal Dopamine 2/3 Receptor Availability in Humans: A PET Neuroimaging Study Using Reinforcement Learning and Active Inference Models. <i>Cerebral Cortex</i> , 2020, 30, 3573-3589.	2.9	24
15	Bayesian modelling captures inter-individual differences in social belief computations in the putamen and insula. <i>Cortex</i> , 2020, 131, 221-236.	2.4	16
16	Hierarchical Bayesian models of social inference for probing persecutory delusional ideation.. <i>Journal of Abnormal Psychology</i> , 2020, 129, 556-569.	1.9	24
17	Neural arbitration between social and individual learning systems. <i>ELife</i> , 2020, 9, .	6.0	14
18	Paranoia as a deficit in non-social belief updating. <i>ELife</i> , 2020, 9, .	6.0	65

#	ARTICLE	IF	CITATIONS
19	Playing with free energy. <i>Neuropsychanalysis</i> , 2020, 22, 81-82.	0.7	1
20	Title is missing!. , 2020, 16, e1008162.		0
21	Title is missing!. , 2020, 16, e1008162.		0
22	Title is missing!. , 2020, 16, e1008162.		0
23	Title is missing!. , 2020, 16, e1008162.		0
24	Subjective estimates of uncertainty during gambling and impulsivity after subthalamic deep brain stimulation for Parkinsonâ€™s disease. <i>Scientific Reports</i> , 2019, 9, 14795.	3.3	15
25	Editorial Note to: Hierarchical Prediction Errors in Midbrain and Basal Forebrain during Sensory Learning. <i>Neuron</i> , 2019, 101, 1195.	8.1	0
26	29.1 COMPUTATIONAL MODELING OF PERCEPTION AND BEHAVIOR REVEALS HIDDEN INSIGHTS INTO MECHANISMS OF PSYCHOTIC SYMPTOMS. <i>Schizophrenia Bulletin</i> , 2019, 45, S136-S136.	4.3	0
27	Dynamic causal modelling revisited. <i>NeuroImage</i> , 2019, 199, 730-744.	4.2	196
28	F150. OVERESTIMATING ENVIRONMENTAL VOLATILITY INCREASES SWITCHING BEHAVIOR AND IS LINKED TO ACTIVATION OF DORSOLATERAL PREFRONTAL CORTEX IN SCHIZOPHRENIA. <i>Schizophrenia Bulletin</i> , 2018, 44, S278-S278.	4.3	1
29	Beliefs about bad people are volatile. <i>Nature Human Behaviour</i> , 2018, 2, 750-756.	12.0	82
30	Attractor-like Dynamics in Belief Updating in Schizophrenia. <i>Journal of Neuroscience</i> , 2018, 38, 9471-9485.	3.6	51
31	F157. HIERARCHICAL PREDICTION ERRORS DURING AUDITORY MISMATCH UNDER PHARMACOLOGICAL MANIPULATIONS: A COMPUTATIONAL SINGLE-TRIAL EEG ANALYSIS. <i>Schizophrenia Bulletin</i> , 2018, 44, S281-S282.	4.3	2
32	Modeling subjective relevance in schizophrenia and its relation to aberrant salience. <i>PLoS Computational Biology</i> , 2018, 14, e1006319.	3.2	23
33	Human visual exploration reduces uncertainty about the sensed world. <i>PLoS ONE</i> , 2018, 13, e0190429.	2.5	66
34	Representational Uncertainty in the Brain During Threat Conditioning and the Link With Psychopathic Traits. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2017, 2, 689-695.	1.5	18
35	Adults with autism overestimate the volatility of the sensory environment. <i>Nature Neuroscience</i> , 2017, 20, 1293-1299.	14.8	325
36	Pavlovian conditioning-induced hallucinations result from overweighting of perceptual priors. <i>Science</i> , 2017, 357, 596-600.	12.6	515

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37	Hierarchical prediction errors in midbrain and septum during social learning. <i>Social Cognitive and Affective Neuroscience</i> , 2017, 12, 618-634.	3.0	103
38	A unifying Bayesian account of contextual effects in value-based choice. <i>PLoS Computational Biology</i> , 2017, 13, e1005769.	3.2	21
39	Scene Construction, Visual Foraging, and Active Inference. <i>Frontiers in Computational Neuroscience</i> , 2016, 10, 56.	2.1	133
40	Allostatic Self-efficacy: A Metacognitive Theory of Dyshomeostasis-Induced Fatigue and Depression. <i>Frontiers in Human Neuroscience</i> , 2016, 10, 550.	2.0	256
41	Computations of uncertainty mediate acute stress responses in humans. <i>Nature Communications</i> , 2016, 7, 10996.	12.8	216
42	Pharmacological Fingerprints of Contextual Uncertainty. <i>PLoS Biology</i> , 2016, 14, e1002575.	5.6	91
43	How Could We Get Nosology from Computation?. , 2016, , .		2
44	A Novel Framework for Improving Psychiatric Diagnostic Nosology. , 2016, , .		2
45	Evidence for surprise minimization over value maximization in choice behavior. <i>Scientific Reports</i> , 2015, 5, 16575.	3.3	63
46	Cortical Coupling Reflects Bayesian Belief Updating in the Deployment of Spatial Attention. <i>Journal of Neuroscience</i> , 2015, 35, 11532-11542.	3.6	92
47	Optimal inference with suboptimal models: Addiction and active Bayesian inference. <i>Medical Hypotheses</i> , 2015, 84, 109-117.	1.5	80
48	The Dopaminergic Midbrain Encodes the Expected Certainty about Desired Outcomes. <i>Cerebral Cortex</i> , 2015, 25, 3434-3445.	2.9	158
49	Active inference and epistemic value. <i>Cognitive Neuroscience</i> , 2015, 6, 187-214.	1.4	476
50	Uncertainty in perception and the Hierarchical Gaussian Filter. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 825.	2.0	286
51	Spatial Attention, Precision, and Bayesian Inference: A Study of Saccadic Response Speed. <i>Cerebral Cortex</i> , 2014, 24, 1436-1450.	2.9	151
52	Inferring on the Intentions of Others by Hierarchical Bayesian Learning. <i>PLoS Computational Biology</i> , 2014, 10, e1003810.	3.2	134
53	Role of the Medial Prefrontal Cortex in Impaired Decision Making in Juvenile Attention-Deficit/Hyperactivity Disorder. <i>JAMA Psychiatry</i> , 2014, 71, 1165.	11.0	133
54	Computational approaches to psychiatry. <i>Current Opinion in Neurobiology</i> , 2014, 25, 85-92.	4.2	203

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55	Cholinergic Stimulation Enhances Bayesian Belief Updating in the Deployment of Spatial Attention. <i>Journal of Neuroscience</i> , 2014, 34, 15735-15742.	3.6	57
56	Poster #M80 SCHIZOTYPY IS ASSOCIATED WITH A "REVERSAL INFERENCE" DEFICIT BUT NO "JUMPING TO CONCLUSIONS". <i>Schizophrenia Research</i> , 2014, 153, S218-S219.	2.0	0
57	Hierarchical Prediction Errors in Midbrain and Basal Forebrain during Sensory Learning. <i>Neuron</i> , 2013, 80, 519-530.	8.1	285
58	Variational Bayesian mixed-effects inference for classification studies. <i>NeuroImage</i> , 2013, 76, 345-361.	4.2	30
59	Computational modeling of perceptual inference: A hierarchical Bayesian approach that allows for individual and contextual differences in weighting of input. <i>International Journal of Psychophysiology</i> , 2012, 85, 317-318.	1.0	5
60	A Bayesian foundation for individual learning under uncertainty. <i>Frontiers in Human Neuroscience</i> , 2011, 5, 39.	2.0	460
61	Non-Invasive Brain Stimulation Applied to Heschl's Gyrus Modulates Pitch Discrimination. <i>Frontiers in Psychology</i> , 2010, 1, 193.	2.1	61
62	Action "perception mismatch in tone-deafness. <i>Current Biology</i> , 2008, 18, R331-R332.	3.9	151