

Martin Vinck

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4332082/publications.pdf>

Version: 2024-02-01

60
papers

6,336
citations

136885

32
h-index

155592

55
g-index

84
all docs

84
docs citations

84
times ranked

6834
citing authors

#	ARTICLE	IF	CITATIONS
1	Predictive coding of natural images by V1 firing rates and rhythmic synchronization. <i>Neuron</i> , 2022, 110, 1240-1257.e8.	3.8	28
2	Deficient Recurrent Cortical Processing in Congenital Deafness. <i>Frontiers in Systems Neuroscience</i> , 2022, 16, 806142.	1.2	10
3	Spontaneous variability in gamma dynamics described by a damped harmonic oscillator driven by noise. <i>Nature Communications</i> , 2022, 13, 2019.	5.8	21
4	Cortical hierarchy, dual counterstream architecture and the importance of top-down generative networks. <i>NeuroImage</i> , 2021, 225, 117479.	2.1	54
5	Brain rhythms define distinct interaction networks with differential dependence on anatomy. <i>Neuron</i> , 2021, 109, 3862-3878.e5.	3.8	60
6	A mechanism for inter-areal coherence through communication based on connectivity and oscillatory power. <i>Neuron</i> , 2021, 109, 4050-4067.e12.	3.8	80
7	Stimulus-specific plasticity of macaque V1 spike rates and gamma. <i>Cell Reports</i> , 2021, 37, 110086.	2.9	14
8	A Distinct Class of Bursting Neurons with Strong Gamma Synchronization and Stimulus Selectivity in Monkey V1. <i>Neuron</i> , 2020, 105, 180-197.e5.	3.8	45
9	Resonance in the Mouse Ventral Tegmental Area Dopaminergic Network Induced by Regular and Poisson Distributed Optogenetic Stimulation in-vitro. <i>Frontiers in Computational Neuroscience</i> , 2020, 14, 11.	1.2	6
10	Deafness Weakens Interareal Couplings in the Auditory Cortex. <i>Frontiers in Neuroscience</i> , 2020, 14, 625721.	1.4	19
11	Modulation of Functional Connectivity Between Dopamine Neurons of the Rat Ventral Tegmental Area in vitro. <i>Frontiers in Integrative Neuroscience</i> , 2019, 13, 20.	1.0	4
12	Layers of Rhythms “from Cortical Anatomy to Dynamics. <i>Neuron</i> , 2019, 101, 358-360.	3.8	4
13	Multiplexing of Information about Self and Others in Hippocampal Ensembles. <i>Cell Reports</i> , 2019, 29, 3859-3871.e6.	2.9	9
14	Surface color and predictability determine contextual modulation of V1 firing and gamma oscillations. <i>ELife</i> , 2019, 8, .	2.8	70
15	Unsupervised clustering of temporal patterns in high-dimensional neuronal ensembles using a novel dissimilarity measure. <i>PLoS Computational Biology</i> , 2018, 14, e1006283.	1.5	26
16	Investigating large-scale brain dynamics using field potential recordings: analysis and interpretation. <i>Nature Neuroscience</i> , 2018, 21, 903-919.	7.1	299
17	Modulation of cortical circuits by top-down processing and arousal state in health and disease. <i>Current Opinion in Neurobiology</i> , 2018, 52, 172-181.	2.0	43
18	Functional determinants of enhanced and depressed interareal information flow in nonrapid eye movement sleep between neuronal ensembles in rat cortex and hippocampus. <i>Sleep</i> , 2018, 41, .	0.6	14

#	ARTICLE	IF	CITATIONS
19	Altered hippocampal interneuron activity precedes ictal onset. <i>ELife</i> , 2018, 7, .	2.8	59
20	Perirhinal firing patterns are sustained across large spatial segments of the task environment. <i>Nature Communications</i> , 2017, 8, 15602.	5.8	42
21	Tuning of Neuronal Interactions in the Lateral Ventral Tegmental Area by Dopamine Sensitivity. <i>Neuroscience</i> , 2017, 366, 62-69.	1.1	3
22	Theta and beta synchrony coordinate frontal eye fields and anterior cingulate cortex during sensorimotor mapping. <i>Nature Communications</i> , 2017, 8, 13967.	5.8	54
23	Developmental Dysfunction of VIP Interneurons Impairs Cortical Circuits. <i>Neuron</i> , 2017, 95, 884-895.e9.	3.8	123
24	Alterations in Functional Cortical Hierarchy in Hemiparkinsonian Rats. <i>Journal of Neuroscience</i> , 2017, 37, 7669-7681.	1.7	19
25	More Gamma More Predictions: Gamma-Synchronization as a Key Mechanism for Efficient Integration of Classical Receptive Field Inputs with Surround Predictions. <i>Frontiers in Systems Neuroscience</i> , 2016, 10, 35.	1.2	63
26	Effects of Arc/Arg3.1 gene deletion on rhythmic synchronization of hippocampal CA1 neurons during locomotor activity and sleep. <i>Neurobiology of Learning and Memory</i> , 2016, 131, 155-165.	1.0	9
27	Reward Expectancy Strengthens CA1 Theta and Beta Band Synchronization and Hippocampal-Ventral Striatal Coupling. <i>Journal of Neuroscience</i> , 2016, 36, 10598-10610.	1.7	44
28	Spike-Based Functional Connectivity in Cerebral Cortex and Hippocampus: Loss of Global Connectivity Is Coupled to Preservation of Local Connectivity During Non-REM Sleep. <i>Journal of Neuroscience</i> , 2016, 36, 7676-7692.	1.7	37
29	Projection-Specific Visual Feature Encoding by Layer 5 Cortical Subnetworks. <i>Cell Reports</i> , 2016, 14, 2538-2545.	2.9	74
30	How to detect the Granger-causal flow direction in the presence of additive noise?. <i>NeuroImage</i> , 2015, 108, 301-318.	2.1	115
31	Arousal and Locomotion Make Distinct Contributions to Cortical Activity Patterns and Visual Encoding. <i>Neuron</i> , 2015, 86, 740-754.	3.8	676
32	Mapping of Functionally Characterized Cell Classes onto Canonical Circuit Operations in Primate Prefrontal Cortex. <i>Journal of Neuroscience</i> , 2015, 35, 2975-2991.	1.7	88
33	Waking State: Rapid Variations Modulate Neural and Behavioral Responses. <i>Neuron</i> , 2015, 87, 1143-1161.	3.8	648
34	Early-onset cortico-cortical synchronization in the hemiparkinsonian rat model. <i>Journal of Neurophysiology</i> , 2015, 113, 925-936.	0.9	20
35	Cell-Type and State-Dependent Synchronization among Rodent Somatosensory, Visual, Perirhinal Cortex, and Hippocampus CA1. <i>Frontiers in Systems Neuroscience</i> , 2015, 9, 187.	1.2	47
36	Population coding in mouse visual cortex: response reliability and dissociability of stimulus tuning and noise correlation. <i>Frontiers in Computational Neuroscience</i> , 2014, 8, 58.	1.2	67

#	ARTICLE	IF	CITATIONS
37	Respiration phase-locks to fast stimulus presentations: Implications for the interpretation of posterior midline deactivations. Human Brain Mapping, 2014, 35, 4932-4943.	1.9	39
38	Stimulus repetition modulates gamma-band synchronization in primate visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3626-3631.	3.3	112
39	Oscillatory Dynamics and Place Field Maps Reflect Hippocampal Ensemble Processing of Sequence and Place Memory under NMDA Receptor Control. Neuron, 2014, 81, 402-415.	3.8	104
40	Gamma or no gamma, that is the question. Trends in Cognitive Sciences, 2014, 18, 507-509.	4.0	55
41	A Long-Range Fronto-Parietal 5- to 10-Hz Network Predicts "Top-Down" Controlled Guidance in a Task-Switch Paradigm. Cerebral Cortex, 2014, 24, 1996-2008.	1.6	97
42	Attentional Modulation of Cell-Class-Specific Gamma-Band Synchronization in Awake Monkey Area V4. Neuron, 2013, 80, 1077-1089.	3.8	174
43	Orientation selectivity and noise correlation in awake monkey area V1 are modulated by the gamma cycle. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4302-4307.	3.3	108
44	Estimation of the entropy based on its polynomial representation. Physical Review E, 2012, 85, 051139.	0.8	13
45	Estimation of the entropy on the basis of its polynomial representation. , 2012, , .		1
46	NMDA Receptors Control Cue-Outcome Selectivity and Plasticity of Orbitofrontal Firing Patterns during Associative Stimulus-Reward Learning. Neuron, 2012, 76, 813-825.	3.8	29
47	Improved measures of phase-coupling between spikes and the Local Field Potential. Journal of Computational Neuroscience, 2012, 33, 53-75.	0.6	127
48	An improved index of phase-synchronization for electrophysiological data in the presence of volume-conduction, noise and sample-size bias. NeuroImage, 2011, 55, 1548-1565.	2.1	1,212
49	Population coding and neural rhythmicity in the orbitofrontal cortex. Annals of the New York Academy of Sciences, 2011, 1239, 149-161.	1.8	17
50	Specific Contributions of Ventromedial, Anterior Cingulate, and Lateral Prefrontal Cortex for Attentional Selection and Stimulus Valuation. PLoS Biology, 2011, 9, e1001224.	2.6	103
51	Selective Theta-Synchronization of Choice-Relevant Information Subserves Goal-Directed Behavior. Frontiers in Human Neuroscience, 2010, 4, 210.	1.0	136
52	Gamma-Phase Shifting in Awake Monkey Visual Cortex. Journal of Neuroscience, 2010, 30, 1250-1257.	1.7	165
53	Learning-Associated Gamma-Band Phase-Locking of Action-Outcome Selective Neurons in Orbitofrontal Cortex. Journal of Neuroscience, 2010, 30, 10025-10038.	1.7	82
54	Theta-Band Phase Locking of Orbitofrontal Neurons during Reward Expectancy. Journal of Neuroscience, 2010, 30, 7078-7087.	1.7	85

#	ARTICLE	IF	CITATIONS
55	The pairwise phase consistency: A bias-free measure of rhythmic neuronal synchronization. <i>NeuroImage</i> , 2010, 51, 112-122.	2.1	406
56	Theta-activity in anterior cingulate cortex predicts task rules and their adjustments following errors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 5248-5253.	3.3	206
57	System-Wide Replay in the Sensory Cortical-Hippocampal Hierarchy is Associated with Reward Anticipation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
58	The Role of Anatomical Connection Strength for Interareal Communication in Macaque Cortex. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
59	Multiplexing of Self and Other Information in Hippocampal Ensembles. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
60	Stimulus-Specific Plasticity of Macaque V1 Spike Rates and Gamma. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1