

# Ad Aertsen

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

3,555  
citations

279701

23  
h-index

315616

38  
g-index

53  
all docs

53  
docs citations

53  
times ranked

3422  
citing authors

#	ARTICLE	IF	CITATIONS
1	Feed-forward and noise-tolerant detection of feature homogeneity in spiking networks with a latency code. <i>Biological Cybernetics</i> , 2021, 115, 161-176.	0.6	0
2	Insights into hippocampal network function. <i>Nature Computational Science</i> , 2021, 1, 782-783.	3.8	1
3	Differential Coding Strategies in Glutamatergic and GABAergic Neurons in the Medial Cerebellar Nucleus. <i>Journal of Neuroscience</i> , 2020, 40, 159-170.	1.7	26
4	Facilitating the propagation of spiking activity in feedforward networks by including feedback. <i>PLoS Computational Biology</i> , 2020, 16, e1008033.	1.5	18
5	Facilitating the propagation of spiking activity in feedforward networks by including feedback. , 2020, 16, e1008033.		0
6	Facilitating the propagation of spiking activity in feedforward networks by including feedback. , 2020, 16, e1008033.		0
7	Facilitating the propagation of spiking activity in feedforward networks by including feedback. , 2020, 16, e1008033.		0
8	Facilitating the propagation of spiking activity in feedforward networks by including feedback. , 2020, 16, e1008033.		0
9	From space to time: Spatial inhomogeneities lead to the emergence of spatiotemporal sequences in spiking neuronal networks. <i>PLoS Computational Biology</i> , 2019, 15, e1007432.	1.5	20
10	Direct pathway neurons in mouse dorsolateral striatum in vivo receive stronger synaptic input than indirect pathway neurons. <i>Journal of Neurophysiology</i> , 2019, 122, 2294-2303.	0.9	14
11	Portraits of communication in neuronal networks. <i>Nature Reviews Neuroscience</i> , 2019, 20, 117-127.	4.9	126
12	Title is missing!. , 2019, 15, e1007432.		0
13	Title is missing!. , 2019, 15, e1007432.		0
14	Title is missing!. , 2019, 15, e1007432.		0
15	Title is missing!. , 2019, 15, e1007432.		0
16	Hyperactivity of Anterior Cingulate Cortex Areas 24a/24b Drives Chronic Pain-Induced Anxiodepressive-like Consequences. <i>Journal of Neuroscience</i> , 2018, 38, 3102-3115.	1.7	158
17	Real-life speech production and perception have a shared premotor-cortical substrate. <i>Scientific Reports</i> , 2018, 8, 8898.	1.6	30
18	Sensorimotor Processing in the Basal Ganglia Leads to Transient Beta Oscillations during Behavior. <i>Journal of Neuroscience</i> , 2017, 37, 11220-11232.	1.7	40

#	ARTICLE	IF	CITATIONS
19	Neurolinguistic and machine-learning perspectives on direct speech BCIs for restoration of naturalistic communication. <i>Brain-Computer Interfaces</i> , 2017, 4, 186-199.	0.9	23
20	Activity Dynamics and Signal Representation in a Striatal Network Model with Distance-Dependent Connectivity. <i>ENeuro</i> , 2017, 4, ENEURO.0348-16.2017.	0.9	15
21	Dynamical state of the network determines the efficacy of single neuron properties in shaping the network activity. <i>Scientific Reports</i> , 2016, 6, 26029.	1.6	22
22	Predominance of Movement Speed Over Direction in Neuronal Population Signals of Motor Cortex: Intracranial EEG Data and A Simple Explanatory Model. <i>Cerebral Cortex</i> , 2016, 26, 2863-2881.	1.6	40
23	Recovery of Dynamics and Function in Spiking Neural Networks with Closed-Loop Control. <i>PLoS Computational Biology</i> , 2016, 12, e1004720.	1.5	10
24	Effect of edge pruning on structural controllability and observability of complex networks. <i>Scientific Reports</i> , 2015, 5, 18145.	1.6	21
25	Role of Input Correlations in Shaping the Variability and Noise Correlations of Evoked Activity in the Neocortex. <i>Journal of Neuroscience</i> , 2015, 35, 8611-8625.	1.7	25
26	Physiology and Impact of Horizontal Connections in Rat Neocortex. <i>Cerebral Cortex</i> , 2015, 25, 3818-3835.	1.6	46
27	Existence and Control of Go/No-Go Decision Transition Threshold in the Striatum. <i>PLoS Computational Biology</i> , 2015, 11, e1004233.	1.5	42
28	From speech to thought: the neuronal basis of cognitive units in non-experimental, real-life communication investigated using ECoG. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 383.	1.0	18
29	Communication through Resonance in Spiking Neuronal Networks. <i>PLoS Computational Biology</i> , 2014, 10, e1003811.	1.5	78
30	Heart cycle-related effects on event-related potentials, spectral power changes, and connectivity patterns in the human ECoG. <i>NeuroImage</i> , 2013, 81, 178-190.	2.1	109
31	Somatotopic mapping of natural upper- and lower-extremity movements and speech production with high gamma electrocorticography. <i>NeuroImage</i> , 2013, 81, 164-177.	2.1	43
32	Neural system prediction and identification challenge. <i>Frontiers in Neuroinformatics</i> , 2013, 7, 43.	1.3	6
33	Beyond Statistical Significance: Implications of Network Structure on Neuronal Activity. <i>PLoS Computational Biology</i> , 2012, 8, e1002311.	1.5	23
34	Measuring epileptogenicity in kainic acid injected rats. , 2011, , .		4
35	Stereotypical spatiotemporal activity patterns during slow-wave activity in the neocortex. <i>Journal of Neurophysiology</i> , 2011, 106, 3035-3044.	0.9	16
36	Beyond the cortical column: abundance and physiology of horizontal connections imply a strong role for inputs from the surround. <i>Frontiers in Neuroscience</i> , 2011, 5, 32.	1.4	92

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37	The Role of Inhibition in Generating and Controlling Parkinson's Disease Oscillations in the Basal Ganglia. <i>Frontiers in Systems Neuroscience</i> , 2011, 5, 86.	1.2	116
38	Significance of Input Correlations in Striatal Function. <i>PLoS Computational Biology</i> , 2011, 7, e1002254.	1.5	34
39	Functional consequences of correlated excitatory and inhibitory conductances in cortical networks. <i>Journal of Computational Neuroscience</i> , 2010, 28, 579-594.	0.6	71
40	Spiking activity propagation in neuronal networks: reconciling different perspectives on neural coding. <i>Nature Reviews Neuroscience</i> , 2010, 11, 615-627.	4.9	395
41	Gating of Signal Propagation in Spiking Neural Networks by Balanced and Correlated Excitation and Inhibition. <i>Journal of Neuroscience</i> , 2010, 30, 15760-15768.	1.7	109
42	The High-Conductance State of Cortical Networks. <i>Neural Computation</i> , 2008, 20, 1-43.	1.3	180
43	Conditions for Propagating Synchronous Spiking and Asynchronous Firing Rates in a Cortical Network Model. <i>Journal of Neuroscience</i> , 2008, 28, 5268-5280.	1.7	182
44	Synaptic Integration in Rat Frontal Cortex Shaped by Network Activity. <i>Journal of Neurophysiology</i> , 2005, 93, 281-293.	0.9	100
45	Neuronal Integration of Synaptic Input in the Fluctuation-Driven Regime. <i>Journal of Neuroscience</i> , 2004, 24, 2345-2356.	1.7	178
46	Activity dynamics and propagation of synchronous spiking in locally connected random networks. <i>Biological Cybernetics</i> , 2003, 88, 395-408.	0.6	149
47	Propagation of cortical synfire activity: survival probability in single trials and stability in the mean. <i>Neural Networks</i> , 2001, 14, 657-673.	3.3	79
48	Stable propagation of synchronous spiking in cortical neural networks. <i>Nature</i> , 1999, 402, 529-533.	13.7	889