Alain Destexhe

List of Publications by Year
in descending order

198 papers	13,633 citations	31976 53 h-index	26613 107 g-index
298 all docs	298 docs citations	298 times ranked	8418 citing authors

#	Article	IF	Citations
1	Adaptive control of Lipschitz time-delay systems by sigma modification with application to neuronal population dynamics. Systems and Control Letters, 2022, 159, 105082.	2.3	6
2	Properties and Computational Consequences of Fast Dendritic Spikes during Natural Behavior. Neuroscience, 2022, 489, 251-261.	2.3	5
3	Linking Brain Structure, Activity, and Cognitive Function through Computation. ENeuro, 2022, 9, ENEURO.0316-21.2022.	1.9	22
4	Extracellular and intracellular components ofÂtheÂimpedance of neural tissue. Biophysical Journal, 2022, 121, 869-885.	0.5	5
5	A method to convert neural signals into sound sequences. Journal of the Acoustical Society of America, 2022, 151, 3685-3689.	1.1	2
6	Local Field Potentials: Interaction with the Extracellular Medium. , 2022, , 1895-1903.		0
7	Local Field Potential, Relationship to Unit Activity. , 2022, , 1865-1870.		0
8	Local Field Potentials: LFP. , 2022, , 1903-1914.		0
9	LFP Analysis: Overview. , 2022, , 66-70.		0
10	Conductance-Based Adaptive Exponential Integrate-and-Fire Model. Neural Computation, 2021, 33, 41-66.	2.2	23
11	In Silico, Computer Simulations from Neurons up to the Whole Brain. ENeuro, 2021, 8, ENEURO.0124-21.2021.	1.9	8
12	Editorial: new article type â€œperspectiveâ€: Journal of Computational Neuroscience, 2021, 49, 69-69.	1.0	0
13	Modulation of intercolumnar synchronization by endogenous electric fields in cerebral cortex. Science Advances, 2021, 7, .	10.3	14
14	Is There Sufficient Evidence for Criticality in Cortical Systems?. ENeuro, 2021, 8, ENEURO.0551-20.2021.	1.9	24
15	Cortical propagating waves: amplifying and suppressive?. Journal of Computational Neuroscience, 2021, 49, 371-373.	1.0	0
16	An Anatomically Constrained Model of V1 Simple Cells Predicts the Coexistence of Pushâ€“Pull and Broad Inhibition. Journal of Neuroscience, 2021, 41, 7797-7812.	3.6	2
17	Modeling seizures: From single neurons to networks. Seizure: the Journal of the British Epilepsy Association, 2021, 90, 4-8.	2.0	20
18	Optimal responsiveness and information flow in networks of heterogeneous neurons. Scientific Reports, 2021, 11, 17611.	3.3	12

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19	Integration, coincidence detection and resonance in networks of spiking neurons expressing Gamma oscillations and asynchronous states. PLoS Computational Biology, 2021, 17, e1009416.	3.2	11
20	A mean-field approach to the dynamics of networks of complex neurons, from nonlinear Integrate-and-Fire to Hodgkinâ€“Huxley models. Journal of Neurophysiology, 2020, 123, 1042-1051.	1.8	38
21	A kernel-based method to calculate local field potentials from networks of spiking neurons. Journal of Neuroscience Methods, 2020, 344, 108871.	2.5	22
22	Experimental and Computational Study on Motor Control and Recovery After Stroke: Toward a Constructive Loop Between Experimental and Virtual Embodied Neuroscience. Frontiers in Systems Neuroscience, 2020, 14, 31.	2.5	23
23	Modelling unitary fields and the singleâ€neuron contribution to local field potentials in the hippocampus. Journal of Physiology, 2020, 598, 3957-3972.	2.9	19
24	Cellular correlates of wakefulness and slow-wave sleep: evidence for a key role of inhibition. Current Opinion in Physiology, 2020, 15, 68-73.	1.8	3
25	Cholinergic Switch between Two Types of Slow Waves in Cerebral Cortex. Cerebral Cortex, 2020, 30, 3451-3466.	2.9	32
26	Local Field Potentials: LFP. , 2020, , 1-12.		0
27	Local Field Potential, Relationship to Unit Activity. , 2020, , 1-6.		1
28	Local Field Potentials: Interaction with the Extracellular Medium. , 2020, , 1-9.		0
29	The Human Brain Projectâ€”Synergy between neuroscience, computing, informatics, and brain-inspired technologies. PLoS Biology, 2019, 17, e3000344.	5.6	64
30	Electrophysiological monitoring of inhibition in mammalian species, from rodents to humans. Neurobiology of Disease, 2019, 130, 104500.	4.4	16
31	A new computational approach to estimate whole-brain effective connectivity from functional and structural MRI, applied to language development. Scientific Reports, 2019, 9, 8479.	3.3	16
32	The Scientific Case for Brain Simulations. Neuron, 2019, 102, 735-744.	8.1	123
33	Suppressive Traveling Waves Shape Representations of Illusory Motion in Primary Visual Cortex of Awake Primate. Journal of Neuroscience, 2019, 39, 4282-4298.	3.6	36
34	Biologically Realistic Mean-Field Models of Conductance-Based Networks of Spiking Neurons with Adaptation. Neural Computation, 2019, 31, 653-680.	2.2	64
35	Adaptive stimulation strategy for selective brain oscillations disruption in a neuronal population model with delays. IFAC-PapersOnLine, 2019, 51, 250-251.	0.9	0
36	State-dependent mean-field formalism to model different activity states in conductance-based networks of spiking neurons. Physical Review E, 2019, 100, 062413.	2.1	9

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37	Bridging Single Neuron Dynamics to Global Brain States. Frontiers in Systems Neuroscience, 2019, 13, 75.	2.5	28
38	Modeling mesoscopic cortical dynamics using a mean-field model of conductance-based networks of adaptive exponential integrate-and-fire neurons. Journal of Computational Neuroscience, 2018, 44, 45-61.	1.0	55
39	Dendritic sodium spikes endow neurons with inverse firing rate response to correlated synaptic activity. Journal of Computational Neuroscience, 2018, 45, 223-234.	1.0	8
40	Adaptive Scheme for Pathological Oscillations Disruption in a Delayed Neuronal Population Model. , 2018, , .		3
41	Maximum-entropy models reveal the excitatory and inhibitory correlation structures in cortical neuronal activity. Physical Review E, 2018, 98, 012402.	2.1	29
42	Contribution of the Axon Initial Segment to Action Potentials Recorded Extracellularly. ENeuro, 2018, 5, ENEURO.0068-18.2018.	1.9	6
43	Local field potentials primarily reflect inhibitory neuron activity in human and monkey cortex. Scientific Reports, 2017, 7, 40211.	3.3	82
44	Improving voltage-sensitive dye imaging: with a little help from computational approaches. Neurophotonics, 2017, 4, 031215.	3.3	24
45	Enhanced Responsiveness and Low-Level Awareness in Stochastic Network States. Neuron, 2017, 94, 1002-1009.	8.1	44
46	Power-law statistics and universal scaling in the absence of criticality. Physical Review E, 2017, 95, 012413.	2.1	149
47	Is the Extracellular Impedance High and Non-resistive in Cerebral Cortex?. Biophysical Journal, 2017, 113, 1639-1642.	0.5	9
48	A framework to reconcile frequency scaling measurements, from intracellular recordings, local-field potentials, up to EEG and MEGÂsignals. Journal of Integrative Neuroscience, 2017, 16, 3-18.	1.7	21
49	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. BMC Neuroscience, 2017, 18, .	1.9	7
50	Pairwise Ising Model Analysis of Human Cortical Neuron Recordings. Lecture Notes in Computer Science, 2017, , 257-264.	1.3	5
51	Heterogeneous firing responses predict diverse couplings to presynaptic activity in mice layer V pyramidal neurons. PLoS Computational Biology, 2017, 13, e1005452.	3.2	6
52	Refractoriness Accounts for Variable Spike Burst Responses in Somatosensory Cortex. ENeuro, 2017, 4, ENEURO.0173-17.2017.	1.9	8
53	Heterogeneous firing rate response of mouse layer V pyramidal neurons in the fluctuationâ€driven regime. Journal of Physiology, 2016, 594, 3791-3808.	2.9	37
54	Local recording of biological magnetic fields using Giant Magneto Resistance-based micro-probes. Scientific Reports, 2016, 6, 39330.	3.3	37

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55	High-frequency oscillations in human and monkey neocortex during the wakeâ€“sleep cycle. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9363-9368.	7.1	67
56	Dynamic Balance of Excitation and Inhibition in Human and Monkey Neocortex. Scientific Reports, 2016, 6, 23176.	3.3	212
57	Intracellular Impedance Measurements Reveal Non-ohmic Properties of the Extracellular Medium around Neurons. Biophysical Journal, 2016, 110, 234-246.	0.5	48
58	Generalized Cable Models of Neurons and Dendrites. , 2016, , 3037-3047.		0
59	Nonstationary filtered shot-noise processes and applications to neuronal membranes. Physical Review E, 2015, 91, 062102.	2.1	11
60	Gain Modulation of Synaptic Inputs by Network State in Auditory CortexIn Vivo. Journal of Neuroscience, 2015, 35, 2689-2702.	3.6	49
61	Brain networks: small-worlds, after all?. New Journal of Physics, 2014, 16, 105004.	2.9	18
62	Generalized cable formalism to calculate the magnetic field of single neurons and neuronal populations. Physical Review E, 2014, 90, 042723.	2.1	12
63	Noisy Dendrites: Models of Dendritic Integration In Vivo. Springer Series in Computational Neuroscience, 2014, , 173-190.	0.3	1
64	How neuronal computations depend on network state: another piece in the puzzle. Journal of Physiology, 2014, 592, 3339-3339.	2.9	0
65	Measurement of propagating waves from local field potentials and unit activity in the cortex of human and monkey. BMC Neuroscience, 2014, 15, .	1.9	0
66	Microscale impedance measurements suggest that ionic diffusion is implicated in generating extracellular potentials. BMC Neuroscience, 2014, 15, .	1.9	2
67	Cable equation formalism for neuronal magnetic fields. BMC Neuroscience, 2014, 15, .	1.9	0
68	The stimulus-evoked population response in visual cortex of awake monkey is a propagating wave. Nature Communications, 2014, 5, 3675.	12.8	171
69	Local Field Potential, Relationship to Unit Activity. , 2014, , 1-6.		2
70	Local Field Potential Interaction with the Extracellular Medium. , 2014, , 1-10.		1
71	Network Models of Absence Seizures. , 2014, , 11-35.		6
72	Characterization and Compensation of Network-Level Anomalies in Mixed-Signal Neuromorphic Modeling Platforms. PLoS ONE, 2014, 9, e108590.	2.5	42

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73	Mean-Field Formulation of Maxwell Equations to Model Electrically Inhomogeneous and Isotropic Media. Journal of Electromagnetic Analysis and Applications, 2014, 06, 296-302.	0.2	5
74	LFP Analysis: Overview. , 2014, , 1-5.		0
75	Local Field Potentials (LFP). , 2014, , 1-11.		0
76	20 Years of â€œNoiseâ€ Contributions of Computational Neuroscience to the Exploration of the Effect of Background Activity on Central Neurons. , 2013, , 167-186.		0
77	Excitatory and inhibitory contributions to local field potentials in human and monkey. BMC Neuroscience, 2013, 14, .	1.9	0
78	Generalized cable theory for neurons in complex and heterogeneous media. Physical Review E, 2013, 88, 022709.	2.1	39
79	Reply to Gratiy et al.. Journal of Neurophysiology, 2013, 109, 1683-1683.	1.8	7
80	Local field potential. Scholarpedia Journal, 2013, 8, 10713.	0.3	28
81	Avalanche Analysis from Multielectrode Ensemble Recordings in Cat, Monkey, and Human Cerebral Cortex during Wakefulness and Sleep. Frontiers in Physiology, 2012, 3, 302.	2.8	74
82	Stable Learning in Stochastic Network States. Journal of Neuroscience, 2012, 32, 194-214.	3.6	25
83	Analytical Integrate-and-Fire Neuron Models with Conductance-Based Dynamics and Realistic Postsynaptic Potential Time Course for Event-Driven Simulation Strategies. Neural Computation, 2012, 24, 1426-1461.	2.2	14
84	Spatiotemporal dynamics of neocortical excitation and inhibition during human sleep. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1731-1736.	7.1	166
85	Do neurons generate monopolar current sources?. Journal of Neurophysiology, 2012, 108, 953-955.	1.8	31
86	Intracellular recording. , 2012, , 44-91.		11
87	Propagating waves in thalamus, cortex and the thalamocortical system: Experiments and models. Journal of Physiology (Paris), 2012, 106, 222-238.	2.1	71
88	Oversampling method to extract excitatory and inhibitory conductances from single-trial membrane potential recordings. Journal of Neuroscience Methods, 2012, 210, 3-14.	2.5	21
89	Correlated input reveals coexisting coding schemes in a sensory cortex. Nature Neuroscience, 2012, 15, 1691-1699.	14.8	79
90	Neuronal Noise. , 2012, , .		78

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91	Tunable neuromimetic integrated system for emulating cortical neuron models. Frontiers in Neuroscience, 2011, 5, 134.	2.8	26
92	Non-homogeneous extracellular resistivity affects the current-source density profiles of upâ€“down state oscillations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3802-3819.	3.4	32
93	Intracellular and computational evidence for a dominant role of internal network activity in cortical computations. Current Opinion in Neurobiology, 2011, 21, 717-725.	4.2	46
94	Inhibition recruitment in prefrontal cortex during sleep spindles and gating of hippocampal inputs. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17207-17212.	7.1	191
95	Topologically invariant macroscopic statistics in balanced networks of conductance-based integrate-and-fire neurons. Journal of Computational Neuroscience, 2011, 31, 229-245.	1.0	51
96	A comprehensive workflow for general-purpose neural modeling with highly configurable neuromorphic hardware systems. Biological Cybernetics, 2011, 104, 263-296.	1.3	72
97	Comparison of different neuron models to conductance-based post-stimulus time histograms obtained in cortical pyramidal cells using dynamic-clamp in vitro. Biological Cybernetics, 2011, 105, 167-180.	1.3	16
98	A model of propagating waves in cerebral cortex across network states. BMC Neuroscience, 2011, 12, .	1.9	0
99	Generalized theory for current-source-density analysis in brain tissue. Physical Review E, 2011, 84, 041909.	2.1	57
100	Evidence for frequency-dependent extracellular impedance from the transfer function between extracellular and intracellular potentials. Journal of Computational Neuroscience, 2010, 29, 389-403.	1.0	63
101	Comparative power spectral analysis of simultaneous elecroencephalographic and magnetoencephalographic recordings in humans suggests non-resistive extracellular media. Journal of Computational Neuroscience, 2010, 29, 405-421.	1.0	114
102	Modeling extracellular potentials. Journal of Computational Neuroscience, 2010, 29, 367-369.	1.0	9
103	Inhibitory â€œnoiseâ€• Frontiers in Cellular Neuroscience, 2010, 4, 9.	3.7	18
104	Spatiotemporal aspects of slow-waves and seizures in humans. Brain, 2010, 133, 2514-2515.	7.6	1
105	Dendrites Do It in Sequences. Science, 2010, 329, 1611-1612.	12.6	7
106	Comparative power spectral analysis of simultaneous electroencephalographic and magnetoencephalographic recordings in humans suggests non-resistive extracellular media. Journal of Computational Neuroscience, 2010, , 1.	1.0	3
107	BRAIN DYNAMICS AT MULTIPLE SCALES: CAN ONE RECONCILE THE APPARENT LOW-DIMENSIONAL CHAOS OF MACROSCOPIC VARIABLES WITH THE SEEMINGLY STOCHASTIC BEHAVIOR OF SINGLE NEURONS?. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 1687-1702.	1.7	23
108	Can Power-Law Scaling and Neuronal Avalanches Arise from Stochastic Dynamics?. PLoS ONE, 2010, 5, e8982.	2.5	160

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109	Prediction of Spatiotemporal Patterns of Neural Activity from Pairwise Correlations. Physical Review Letters, 2009, 102, 138101.	7.8	107
110	Network-State Modulation of Power-Law Frequency-Scaling in Visual Cortical Neurons. PLoS Computational Biology, 2009, 5, e1000519.	3.2	70
111	Characterizing neuronal activity by describing the membrane potential as a stochastic process. Journal of Physiology (Paris), 2009, 103, 98-106.	2.1	5
112	Analytical integrate-and-fire neuron models with conductance-based dynamics and realistic PSP time course for event-driven simulation strategies. BMC Neuroscience, 2009, 10, .	1.9	0
113	The Wilsonâ€“Cowan model, 36Âyears later. Biological Cybernetics, 2009, 101, 1-2.	1.3	144
114	Self-sustained asynchronous irregular states and Upâ€“Down states in thalamic, cortical and thalamocortical networks of nonlinear integrate-and-fire neurons. Journal of Computational Neuroscience, 2009, 27, 493-506.	1.0	193
115	Macroscopic Models of Local Field Potentials and the Apparent 1/f Noise in Brain Activity. Biophysical Journal, 2009, 96, 2589-2603.	0.5	184
116	A Master Equation Formalism for Macroscopic Modeling of Asynchronous Irregular Activity States. Neural Computation, 2009, 21, 46-100.	2.2	149
117	Associating Living Cells and Computational Models: an Introduction to Dynamic Clamp Principles and its Applications. , 2009, , 1-30.		3
118	Re-Creating In Vivo-Like Activity and Investigating the Signal Transfer Capabilities of Neurons: Dynamic-Clamp Applications Using Real-Time Neuron. , 2009, , 287-320.		4
119	Modeling Voltage-Dependent Channels. , 2009, , 107-138.		5
120	Testing Methods for Synaptic Conductance Analysis Using Controlled Conductance Injection with Dynamic Clamp. , 2009, , 115-140.		0
121	Dynamic Clamp with High-Resistance Electrodes Using Active Electrode Compensation In Vitro and In Vivo. , 2009, , 347-382.		1
122	Convergence in an Adaptive Neural Network: The Influence of Noise Inputs Correlation. Lecture Notes in Computer Science, 2009, , 140-148.	1.3	1
123	Minimal Hodgkinâ€“Huxley type models for different classes of cortical and thalamic neurons. Biological Cybernetics, 2008, 99, 427-441.	1.3	241
124	Characterizing synaptic conductance fluctuations in cortical neurons and their influence on spike generation. Journal of Neuroscience Methods, 2008, 169, 302-322.	2.5	41
125	Methods for computational neuroscience. Journal of Neuroscience Methods, 2008, 169, 269-270.	2.5	1
126	A Modified Cable Formalism for Modeling Neuronal Membranes at High Frequencies. Biophysical Journal, 2008, 94, 1133-1143.	0.5	31

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127	High-Resolution Intracellular Recordings Using a Real-Time Computational Model of the Electrode. Neuron, 2008, 59, 379-391.	8.1	69
128	State Dependence of Network Output: Modeling and Experiments. Journal of Neuroscience, 2008, 28, 11806-11813.	3.6	31
129	Hyperpolarization-activated graded persistent activity in the prefrontal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7298-7303.	7.1	59
130	Corticothalamic Feedback. , 2008, , 184-214.		17
131	A Master Equation Formalism for Macroscopic Modeling of Asynchronous Irregular Activity States. Neural Computation, 2008, .	2.2	1
132	COMPLEXITY IN NEURONAL NETWORKS. Complex Systems and Interdisciplinary Science, 2007, , 291-340.	0.2	2
133	Are corticothalamic â€˜upâ€™ states fragments of wakefulness?. Trends in Neurosciences, 2007, 30, 334-342.	8.6	320
134	Inhibition Determines Membrane Potential Dynamics and Controls Action Potential Generation in Awake and Sleeping Cat Cortex. Journal of Neuroscience, 2007, 27, 5280-5290.	3.6	226
135	Calculating Event-Triggered Average Synaptic Conductances From the Membrane Potential. Journal of Neurophysiology, 2007, 97, 2544-2552.	1.8	28
136	Mesoscopic model of balanced neuron networks using a Master equation formalism. BMC Neuroscience, 2007, 8, .	1.9	0
137	A non-parametric electrode model for intracellular recording. Neurocomputing, 2007, 70, 1597-1601.	5.9	15
138	Inhibitory conductance dynamics in cortical neurons during activated states. Neurocomputing, 2007, 70, 1602-1604.	5.9	0
139	How much can we trust neural simulation strategies?. Neurocomputing, 2007, 70, 1966-1969.	5.9	31
140	Activated cortical states: Experiments, analyses and models. Journal of Physiology (Paris), 2007, 101, 99-109.	2.1	35
141	Simulation of networks of spiking neurons: A review of tools and strategies. Journal of Computational Neuroscience, 2007, 23, 349-398.	1.0	639
142	Kinetic models of spike-timing dependent plasticity and their functional consequences in detecting correlations. Biological Cybernetics, 2007, 97, 81-97.	1.3	24
143	High-conductance state. Scholarpedia Journal, 2007, 2, 1341.	0.3	14
144	Spike-and-wave oscillations. Scholarpedia Journal, 2007, 2, 1402.	0.3	7

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145	Event-based simulation strategy for conductance-based synaptic interactions and plasticity. Neurocomputing, 2006, 69, 1130-1133.	5.9	5
146	On the Use of Analytical Expressions for the Voltage Distribution to Analyze Intracellular Recordings. Neural Computation, 2006, 18, 2917-2922.	2.2	21
147	Analytical Integrate-and-Fire Neuron Models with Conductance-Based Dynamics for Event-Driven Simulation Strategies. Neural Computation, 2006, 18, 2146-2210.	2.2	61
148	Neuronal Computations with Stochastic Network States. Science, 2006, 314, 85-90.	12.6	219
149	Analog-digital simulations of full conductance-based networks of spiking neurons with spike timing dependent plasticity. Network: Computation in Neural Systems, 2006, 17, 211-233.	3.6	14
150	BIOPHYSICAL AND PHENOMENOLOGICAL MODELS OF MULTIPLE SPIKE INTERACTIONS IN SPIKE-TIMING DEPENDENT PLASTICITY. International Journal of Neural Systems, 2006, 16, 79-97.	5.2	56
151	Synaptic background activity controls spike transfer from thalamus to cortex. Nature Neuroscience, 2005, 8, 1760-1767.	14.8	155
152	Multi-channel shot noise and characterization of cortical network activity. Neurocomputing, 2005, 65-66, 641-646.	5.9	2
153	Re-creating active states in vitro with a dynamic-clamp protocol. Neurocomputing, 2005, 65-66, 55-60.	5.9	5
154	Extracting information from the power spectrum of voltage noise. Neurocomputing, 2005, 65-66, 901-906.	5.9	1
155	High discharge variability in neurons driven by current noise. Neurocomputing, 2005, 65-66, 493-498.	5.9	11
156	Characterization of Synaptic Conductances and Integrative Properties During Electrically Induced EEG-Activated States in Neocortical Neurons In Vivo. Journal of Neurophysiology, 2005, 94, 2805-2821.	1.8	93
157	A Method to Estimate Synaptic Conductances From Membrane Potential Fluctuations. Journal of Neurophysiology, 2004, 91, 2884-2896.	1.8	102
158	Plasticity in single neuron and circuit computations. Nature, 2004, 431, 789-795.	27.8	239
159	A novel method for characterizing synaptic noise in cortical neurons. Neurocomputing, 2004, 58-60, 191-196.	5.9	11
160	Simulating cortical network activity states constrained by intracellular recordings. Neurocomputing, 2004, 58-60, 285-290.	5.9	7
161	Estimation of synaptic conductances and their variances from intracellular recordings of neocortical neurons in vivo. Neurocomputing, 2004, 58-60, 387-392.	5.9	4
162	Inferring network activity from synaptic noise. Journal of Physiology (Paris), 2004, 98, 452-466.	2.1	15

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163	Extracting Information from the Power Spectrum of Synaptic Noise. Journal of Computational Neuroscience, 2004, 17, 327-345.	1.0	33
164	Modeling Extracellular Field Potentials and the Frequency-Filtering Properties of Extracellular Space. Biophysical Journal, 2004, 86, 1829-1842.	0.5	264
165	Tuning neocortical pyramidal neurons between integrators and coincidence detectors. Journal of Computational Neuroscience, 2003, 14, 239-251.	1.0	106
166	Location independence and fast conduction of synaptic inputs in neocortical neurons in vivo. Neurocomputing, 2003, 52-54, 233-238.	5.9	1
167	Gain modulation and frequency locking under conductance noise. Neurocomputing, 2003, 52-54, 907-912.	5.9	4
168	The high-conductance state of neocortical neurons in vivo. Nature Reviews Neuroscience, 2003, 4, 739-751.	10.2	938
169	A Fast-Conducting, Stochastic Integrative Mode for Neocortical NeuronsInVivo. Journal of Neuroscience, 2003, 23, 2466-2476.	3.6	103
170	The initiation of bursts in thalamic neurons and the cortical control of thalamic sensitivity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 1649-1657.	4.0	54
171	Do neocortical pyramidal neurons display stochastic resonance?. Journal of Computational Neuroscience, 2001, 11, 19-42.	1.0	52
172	LTS cells in cerebral cortex and their role in generating spike-and-wave oscillations. Neurocomputing, 2001, 38-40, 555-563.	5.9	47
173	Synaptic background activity affects the dynamics of dendritic integration in model neocortical pyramidal neurons. Neurocomputing, 2001, 38-40, 327-333.	5.9	7
174	Simplified models of neocortical pyramidal cells preserving somatodendritic voltage attenuation. Neurocomputing, 2001, 38-40, 167-173.	5.9	30
175	Correlation Detection and Resonance in Neural Systems with Distributed Noise Sources. Physical Review Letters, 2001, 86, 3662-3665.	7.8	69
176	Modelling corticothalamic feedback and the gating of the thalamus by the cerebral cortex. Journal of Physiology (Paris), 2000, 94, 391-410.	2.1	87
177	Why do we sleep?11Published on the World Wide Web on 7 November 2000.. Brain Research, 2000, 886, 208-223.	2.2	466
178	Nonlinear thermodynamic models of voltage-dependent currents. Journal of Computational Neuroscience, 2000, 9, 259-270.	1.0	58
179	Synaptic Background Activity Enhances the Responsiveness of Neocortical Pyramidal Neurons. Journal of Neurophysiology, 2000, 84, 1488-1496.	1.8	220
180	Cortical Feedback Controls the Frequency and Synchrony of Oscillations in the Visual Thalamus. Journal of Neuroscience, 2000, 20, 7478-7488.	3.6	151

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181	Spatiotemporal Analysis of Local Field Potentials and Unit Discharges in Cat Cerebral Cortex during Natural Wake and Sleep States. Journal of Neuroscience, 1999, 19, 4595-4608.	3.6	544
182	Impact of Network Activity on the Integrative Properties of Neocortical Pyramidal Neurons In Vivo. Journal of Neurophysiology, 1999, 81, 1531-1547.	1.8	551
183	Can GABAAconductances explain the fast oscillation frequency of absence seizures in rodents?. European Journal of Neuroscience, 1999, 11, 2175-2181.	2.6	85
184	Biophysics of Computation: Information Processing in Single Neurons, by Christof Koch. Trends in Cognitive Sciences, 1999, 3, 444.	7.8	1
185	Chapter 17 Thalamic and thalamocortical mechanisms underlying 3 Hz spike-and-wave discharges. Progress in Brain Research, 1999, 121, 289-307.	1.4	48
186	Dendritic Low-Threshold Calcium Currents in Thalamic Relay Cells. Journal of Neuroscience, 1998, 18, 3574-3588.	3.6	306
187	Impact of Spontaneous Synaptic Activity on the Resting Properties of Cat Neocortical Pyramidal Neurons In Vivo. Journal of Neurophysiology, 1998, 79, 1450-1460.	1.8	398
188	Mechanisms Underlying the Synchronizing Action of Corticothalamic Feedback Through Inhibition of Thalamic Relay Cells. Journal of Neurophysiology, 1998, 79, 999-1016.	1.8	337
189	Spike-and-Wave Oscillations Based on the Properties of GABA_BReceptors. Journal of Neuroscience, 1998, 18, 9099-9111.	3.6	240
190	Conductance-Based Integrate-and-Fire Models. Neural Computation, 1997, 9, 503-514.	2.2	87
191	Intracellular and Computational Characterization of the Intracortical Inhibitory Control of Synchronized Thalamic Inputs In Vivo. Journal of Neurophysiology, 1997, 78, 335-350.	1.8	161
192	Dynamic Interactions Determine Partial Thalamic Quiescence in a Computer Network Model of Spike-and-Wave Seizures. Journal of Neurophysiology, 1997, 77, 1679-1696.	1.8	82
193	Spatiotemporal Patterns of Spindle Oscillations in Cortex and Thalamus. Journal of Neuroscience, 1997, 17, 1179-1196.	3.6	290
194	Oscillations, complex spatiotemporal behavior, and information transport in networks of excitatory and inhibitory neurons. Physical Review E, 1994, 50, 1594-1606.	2.1	67
195	Synthesis of models for excitable membranes, synaptic transmission and neuromodulation using a common kinetic formalism. Journal of Computational Neuroscience, 1994, 1, 195-230.	1.0	508
196	Extracellular spikes and CSD. , 0, , 92-135.		55
197	Local field potentials. , 0, , 136-191.		23
198	Voltage-sensitive dye imaging. , 0, , 327-361.		1