

# Eric J Lang

## List of Publications by Year in descending order

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56  
papers

3,673  
citations

201674

27  
h-index

223800

46  
g-index

58  
all docs

58  
docs citations

58  
times ranked

2466  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamic organization of motor control within the olivocerebellar system. <i>Nature</i> , 1995, 374, 453-457.	27.8	706
2	Impact of Spontaneous Synaptic Activity on the Resting Properties of Cat Neocortical Pyramidal Neurons In Vivo. <i>Journal of Neurophysiology</i> , 1998, 79, 1450-1460.	1.8	398
3	Redefining the cerebellar cortex as an assembly of non-uniform Purkinje cell microcircuits. <i>Nature Reviews Neuroscience</i> , 2015, 16, 79-93.	10.2	253
4	Uniform olivocerebellar conduction time underlies Purkinje cell complex spike synchronicity in the rat cerebellum.. <i>Journal of Physiology</i> , 1993, 470, 243-271.	2.9	216
5	Patterns of Spontaneous Purkinje Cell Complex Spike Activity in the Awake Rat. <i>Journal of Neuroscience</i> , 1999, 19, 2728-2739.	3.6	213
6	Mnemonic correlates of unit activity in the hippocampus. <i>Brain Research</i> , 1986, 399, 97-110.	2.2	120
7	Block of Inferior Olive Gap Junctional Coupling Decreases Purkinje Cell Complex Spike Synchrony and Rhythmicity. <i>Journal of Neuroscience</i> , 2006, 26, 1739-1748.	3.6	120
8	Synaptic responsiveness of interneurons of the cat lateral amygdaloid nucleus. <i>Neuroscience</i> , 1998, 83, 877-889.	2.3	110
9	GABAergic and Glutamatergic Modulation of Spontaneous and Motor-Cortex-Evoked Complex Spike Activity. <i>Journal of Neurophysiology</i> , 2002, 87, 1993-2008.	1.8	92
10	The inositol high-polyphosphate series blocks synaptic transmission by preventing vesicular fusion: a squid giant synapse study.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 12990-12993.	7.1	91
11	The Roles of the Olivocerebellar Pathway in Motor Learning and Motor Control. A Consensus Paper. <i>Cerebellum</i> , 2017, 16, 230-252.	2.5	89
12	Organization of Olivocerebellar Activity in the Absence of Excitatory Glutamatergic Input. <i>Journal of Neuroscience</i> , 2001, 21, 1663-1675.	3.6	86
13	Systematic Regional Variations in Purkinje Cell Spiking Patterns. <i>PLoS ONE</i> , 2014, 9, e105633.	2.5	84
14	Role of Myelination in the Development of a Uniform Olivocerebellar Conduction Time. <i>Journal of Neurophysiology</i> , 2003, 89, 2259-2270.	1.8	78
15	Olivocerebellar modulation of motor cortex ability to generate vibrissal movements in rat. <i>Journal of Physiology</i> , 2006, 571, 101-120.	2.9	74
16	Spontaneous activity of the perirhinal cortex in behaving cats. <i>Neuroscience</i> , 1999, 89, 1025-1039.	2.3	63
17	Inferior Olive Oscillations Gate Transmission of Motor Cortical Activity to the Cerebellum. <i>Journal of Neuroscience</i> , 2004, 24, 11356-11367.	3.6	59
18	Relationship of complex spike synchrony bands and climbing fiber projection determined by reference to aldolase C compartments in crus IIa of the rat cerebellar cortex. <i>Journal of Comparative Neurology</i> , 2007, 501, 13-29.	1.6	58

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19	Synaptic Action of the Olivocerebellar System on Cerebellar Nuclear Spike Activity. <i>Journal of Neuroscience</i> , 2011, 31, 14708-14720.	3.6	56
20	Local Changes in the Excitability of the Cerebellar Cortex Produce Spatially Restricted Changes in Complex Spike Synchrony. <i>Journal of Neuroscience</i> , 2009, 29, 14352-14362.	3.6	52
21	Inhibitory control of somatodendritic interactions underlying action potentials in neocortical pyramidal neurons in vivo: An intracellular and computational study. <i>Neuroscience</i> , 1998, 84, 377-402.	2.3	44
22	Kv3.3 Channels at the Purkinje Cell Soma Are Necessary for Generation of the Classical Complex Spike Waveform. <i>Journal of Neuroscience</i> , 2008, 28, 1291-1300.	3.6	43
23	Complex spike synchrony dependent modulation of rat deep cerebellar nuclear activity. <i>ELife</i> , 2019, 8, .	6.0	42
24	<i>Cerebellum</i> . , 2004, , 271-310.		41
25	Role of the olivo-cerebellar complex in motor learning and control. <i>Frontiers in Neural Circuits</i> , 2013, 7, 94.	2.8	40
26	Altered olivocerebellar activity patterns in the connexin36 knockout mouse. <i>Cerebellum</i> , 2007, 6, 287-299.	2.5	39
27	Heterogeneity of Purkinje cell simple spikeâ€™complex spike interactions: zebrinâ€™and nonâ€™zebrinâ€™related variations. <i>Journal of Physiology</i> , 2017, 595, 5341-5357.	2.9	34
28	Excitatory afferent modulation of complex spike synchrony. <i>Cerebellum</i> , 2003, 2, 165-170.	2.5	33
29	Synchrony is Key: Complex Spike Inhibition of the Deep Cerebellar Nuclei. <i>Cerebellum</i> , 2016, 15, 10-13.	2.5	33
30	Calcium electrogenesis in neocortical pyramidal neurons in vivo. <i>European Journal of Neuroscience</i> , 1998, 10, 3164-3170.	2.6	29
31	The dynamic relationship between cerebellar Purkinje cell simple spikes and the spikelet number of complex spikes. <i>Journal of Physiology</i> , 2017, 595, 283-299.	2.9	29
32	Current Opinions and Consensus for Studying Tremor in Animal Models. <i>Cerebellum</i> , 2019, 18, 1036-1063.	2.5	27
33	Control of Cerebellar Nuclear Cells: A Direct Role for Complex Spikes?. <i>Cerebellum</i> , 2011, 10, 694-701.	2.5	26
34	Entrainment of cerebellar purkinje cells with directional AC electric fields in anesthetized rats. <i>Brain Stimulation</i> , 2020, 13, 1548-1558.	1.6	24
35	Increased Purkinje Cell Complex Spike and Deep Cerebellar Nucleus Synchrony as a Potential Basis for Syndromic Essential Tremor. A Review and Synthesis of the Literature. <i>Cerebellum</i> , 2021, 20, 266-281.	2.5	23
36	Modulation of Purkinje cell complex spike waveform by synchrony levels in the olivocerebellar system. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 210.	2.5	20

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37	A New Approach to the Analysis of Multidimensional Neuronal Activity: Markov Random Fields. <i>Neural Networks</i> , 1997, 10, 785-789.	5.9	18
38	Isochrony in the olivocerebellar system underlies complex spike synchrony. <i>Journal of Physiology</i> , 2006, 573, 277-279.	2.9	17
39	QUANTITATIVE MODELING OF SPATIO-TEMPORAL DYNAMICS OF INFERIOR OLIVE NEURONS WITH A SIMPLE CONDUCTANCE-BASED MODEL. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010, 20, 583-603.	1.7	17
40	Inhibitory control of rat lateral amygdaloid projection cells. <i>Neuroscience</i> , 2003, 121, 155-166.	2.3	16
41	Electrical coupling controls dimensionality and chaotic firing of inferior olive neurons. <i>PLoS Computational Biology</i> , 2020, 16, e1008075.	3.2	15
42	Testing a neural coding hypothesis using surrogate data. <i>Journal of Neuroscience Methods</i> , 2008, 172, 312-322.	2.5	14
43	Solution to the inverse problem of estimating gap-junctional and inhibitory conductance in inferior olive neurons from spike trains by network model simulation. <i>Neural Networks</i> , 2013, 47, 51-63.	5.9	13
44	Is the inferior olive central to essential tremor? Yes. <i>International Review of Neurobiology</i> , 2022, , 133-165.	2.0	6
45	Recurrence Plots and the Analysis of Multiple Spike Trains. , 2014, , 735-744.		3
46	Dysmyelination with preservation of transverse bands in a long-lived allele of the <i>quaking</i> mouse. <i>Journal of Comparative Neurology</i> , 2015, 523, 197-208.	1.6	2
47	Multielectrode Arrays for Recording Complex Spike Activity. <i>NeuroMethods</i> , 2018, , 73-85.	0.3	2
48	Coordination of Reaching Movements. , 2016, , 197-217.		2
49	Excitatory afferent modulation of complex spike synchrony. <i>Cerebellum</i> , 2003, 2, 165-170.	2.5	2
50	Oscillatory Properties of Inferior Olivary Neurons Modulate Transmission of Motor Cortical Activity to the Rat Cerebellum. <i>Annals of the New York Academy of Sciences</i> , 2002, 978, 530-532.	3.8	0
51	Electrical coupling controls dimensionality and chaotic firing of inferior olive neurons. , 2020, 16, e1008075.		0
52	Electrical coupling controls dimensionality and chaotic firing of inferior olive neurons. , 2020, 16, e1008075.		0
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