John E Lewis

List of Publications by Year
in descending order

36	1,187	394421	395702
papers	citations	19 h-index	33 g-index

38	38	38	708
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamics of a neuronal pacemaker in the weakly electric fish Apteronotus. Scientific Reports, 2020, 10, 16707.	3.3	3
2	Electrosensory Contrast Signals for Interacting Weakly Electric Fish. Frontiers in Integrative Neuroscience, 2019, 13, 36.	2.1	12
3	ELFENN: A Generalized Platform for Modeling Ephaptic Coupling in Spiking Neuron Models. Frontiers in Neuroinformatics, 2019, 13, 35.	2.5	11
4	Neuronal Dynamics Underlying Communication Signals in a Weakly Electric Fish: Implications for Connectivity in a Pacemaker Network. Neuroscience, 2019, 401, 21-34.	2.3	10
5	Spatiotemporal model for depth perception in electric sensing. Journal of Theoretical Biology, 2019, 461, 157-169.	1.7	2
6	The complexity of high-frequency electric fields degrades electrosensory inputs: implications for the jamming avoidance response in weakly electric fish. Journal of the Royal Society Interface, 2018, 15, 20170633.	3.4	8
7	Motion parallax in electric sensing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 573-577.	7.1	31
8	A model for studying the energetics of sustained high frequency firing. PLoS ONE, 2018, 13, e0196508.	2.5	2
9	What does a butterfly hear? Physiological characterization of auditory afferents in Morpho peleides (Nymphalidae). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2018, 204, 791-799.	1.6	10
10	Short-term synaptic plasticity across topographic maps in the electrosensory system. Neuroscience, 2016, 318, 1-11.	2.3	3
11	Ultrafast traveling wave dominates the electric organ discharge of Apteronotus leptorhynchus: an inverse modelling study. Scientific Reports, 2015, 5, 15780.	3.3	9
12	Electrophysiological characterization of male goldfish (Carassius auratus) ventral preoptic area neurons receiving olfactory inputs. Frontiers in Neuroscience, 2014, 8, 185.	2.8	3
13	Action Potential Energetics at the Organismal Level Reveal a Trade-Off in Efficiency at High Firing Rates. Journal of Neuroscience, 2014, 34, 197-201.	3.6	44
14	The neuroethology of electrocommunication: How signal background influences sensory encoding and behaviour in Apteronotus leptorhynchus. Journal of Physiology (Paris), 2013, 107, 13-25.	2.1	34
15	The energetics of electric organ discharge generation in gymnotiform weakly electric fish. Journal of Experimental Biology, 2013, 216, 2459-2468.	1.7	57
16	Coding Conspecific Identity and Motion in the Electric Sense. PLoS Computational Biology, 2012, 8, e1002564.	3.2	49
17	Zebrafish (Danio rerio) gill neuroepithelial cells are sensitive chemoreceptors for environmental CO₂. Journal of Physiology, 2010, 588, 861-872.	2.9	90
18	Burst-Induced Anti-Hebbian Depression Acts through Short-Term Synaptic Dynamics to Cancel Redundant Sensory Signals. Journal of Neuroscience, 2010, 30, 6152-6169.	3.6	52

#	Article	IF	Citations
19	Broadband Coding with Dynamic Synapses. Journal of Neuroscience, 2009, 29, 2076-2087.	3.6	62
20	Electric field interactions in pairs of electric fish: modeling and mimicking naturalistic inputs. Biological Cybernetics, 2008, 98, 479-490.	1.3	38
21	In vitro studies of closed-loop feedback and electrosensory processing in Apteronotus leptorhynchus. Journal of Physiology (Paris), 2008, 102, 173-180.	2.1	3
22	The effect of difference frequency on electrocommunication: Chirp production and encoding in a species of weakly electric fish, Apteronotus leptorhynchus. Journal of Physiology (Paris), 2008, 102, 164-172.	2.1	39
23	Electrocommunication signals in free swimming brown ghost knifefish, Apteronotus leptorhynchus. Journal of Experimental Biology, 2008, 211, 1657-1667.	1.7	106
24	Control of neuronal firing by dynamic parallel fiber feedback:implications for electrosensory reafference suppression. Journal of Experimental Biology, 2007, 210, 4437-4447.	1.7	11
25	Spatial Acuity and Prey Detection in Weakly Electric Fish. PLoS Computational Biology, 2007, 3, e38.	3.2	69
26	Modeling the electric field of weakly electric fish. Journal of Experimental Biology, 2006, 209, 3636-3651.	1.7	66
27	Synaptic Dynamics on Different Time Scales in a Parallel Fiber Feedback Pathway of the Weakly Electric Fish. Journal of Neurophysiology, 2004, 91, 1064-1070.	1.8	31
28	Blurring of the senses: common cues for distance perception in diverse sensory systems. Neuroscience, 2002, 114, 19-22.	2.3	25
29	Dynamics of Electrosensory Feedback: Short-Term Plasticity and Inhibition in a Parallel Fiber Pathway. Journal of Neurophysiology, 2002, 88, 1695-1706.	1.8	47
30	Dynamically Interacting Processes Underlie Synaptic Plasticity in a Feedback Pathway. Journal of Neurophysiology, 2002, 87, 2450-2463.	1.8	21
31	Neuronal Population Codes and the Perception of Object Distance in Weakly Electric Fish. Journal of Neuroscience, 2001, 21, 2842-2850.	3.6	44
32	The dynamics inside the box. Nature Neuroscience, 2000, 3, 309-309.	14.8	0
33	A neuronal network for computing population vectors in the leech. Nature, 1998, 391, 76-79.	27.8	121
34	Phase resetting and fixed-delay stimulation of a simple model of respiratory rhythm generation. Journal of Theoretical Biology, 1992, 159, 491-506.	1.7	18
35	The effects of superior laryngeal nerve stimulation on the respiratory rhythm: phase-resetting and aftereffects. Brain Research, 1990, 517, 44-50.	2.2	37
36	Complex dynamics resulting from repeated stimulation of nonlinear oscillators at a fixed phase. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 125, 119-122.	2.1	18