Matti WeckstrÃ¶m

List of Publications by Year
in descending order

44 papers	1,252 citations	331670 21 h-index	377865 34 g-index
44 all docs	44 docs citations	44 times ranked	1093 citing authors

#	Article	IF	Citations
1	The effect of vertical extent of stimuli on cockroach optomotor response. Journal of Experimental Biology, 2020, 223, .	1.7	0
2	Non-linear amplification of graded voltage signals in the first-order visual interneurons of the butterflyPapilio xuthus. Journal of Experimental Biology, 2018, 221, .	1.7	10
3	The role of ocelli in cockroach optomotor performance. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2018, 204, 231-243.	1.6	12
4	Insect photoreceptor adaptations to night vision. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160077.	4.0	32
5	Characterization of the first-order visual interneurons in the visual system of the bumblebee (Bombus terrestris). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 903-913.	1.6	9
6	Frequency-selective transmission of graded signals in large monopolar neurons of blowflyCalliphora vicinacompound eye. Journal of Neurophysiology, 2016, 115, 2052-2064.	1.8	9
7	Visual ecology and potassium conductances of insect photoreceptors. Journal of Neurophysiology, 2016, 115, 2147-2157.	1.8	12
8	Harnessing the Flow of Excitation. Advances in Protein Chemistry and Structural Biology, 2016, 103, 25-95.	2.3	5
9	New indices of arterial stiffness measured from longitudinal motion of common carotid artery in relation to reference methods, a pilot study. Clinical Physiology and Functional Imaging, 2016, 36, 376-388.	1.2	21
10	Transcriptome analysis and RNA interference of cockroach phototransduction indicate three opsins and suggest a major role for TRPL channels. Frontiers in Physiology, 2015, 6, 207.	2.8	42
11	Effect of light intensity on flight control and temporal properties of photoreceptors in bumblebees. Journal of Experimental Biology, 2015, 218, 1339-46.	1.7	47
12	Difference in dynamic properties of photoreceptors in a butterfly, Papilio xuthus: possible segregation of motion and color processing. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2015, 201, 1115-1123.	1.6	11
13	Elementary and macroscopic light-induced currents and their Ca2+-dependence in the photoreceptors of Periplaneta americana. Frontiers in Physiology, 2014, 5, 153.	2.8	20
14	Cockroach optomotor responses below single photon level. Journal of Experimental Biology, 2014, 217, 4262-4268.	1.7	32
15	Large variation among photoreceptors as the basis of visual flexibility in the common backswimmer. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20141177.	2.6	17
16	Performance of blue- and green-sensitive photoreceptors of the cricket Gryllus bimaculatus. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2014, 200, 209-219.	1.6	27
17	Developmental changes in biophysical properties of photoreceptors in the common water strider (Gerris lacustris): better performance at higher cost. Journal of Neurophysiology, 2014, 112, 913-922.	1.8	19
18	Equilibrating errors: reliable estimation of information transmission rates in biological systems with spectral analysis-based methods. Biological Cybernetics, 2014, 108, 305-320.	1.3	4

#	Article	IF	Citations
19	Spikes and ribbon synapses in early vision. Trends in Neurosciences, 2013, 36, 480-488.	8.6	56
20	Membrane filtering properties of the bumblebee (Bombus terrestris) photoreceptors across three spectral classes. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2013, 199, 629-639.	1.6	5
21	Postembryonic Developmental Changes in Photoreceptors of the Stick InsectCarausius morosus Enhance the Shift to an Adult Nocturnal Life-Style. Journal of Neuroscience, 2012, 32, 16821-16831.	3.6	29
22	Cellular elements for seeing in the dark: voltage-dependent conductances in cockroach photoreceptors. BMC Neuroscience, 2012, 13, 93.	1.9	22
23	A Novel Estimator for the Rate of Information Transfer by Continuous Signals. PLoS ONE, 2011, 6, e18792.	2.5	6
24	Extracellular Potentials Modify the Transfer of Information at Photoreceptor Output Synapses in the Blowfly Compound Eye. Journal of Neuroscience, 2010, 30, 9557-9566.	3.6	22
25	Modelling sarcoplasmic reticulum calcium ATPase and its regulation in cardiac myocytes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 2181-2202.	3.4	30
26	Regulation of excitation-contraction coupling in mouse cardiac myocytes: integrative analysis with mathematical modelling. BMC Physiology, 2009, 9, 16.	3.6	23
27	Light-Dependent Modulation of Shab Channels via Phosphoinositide Depletion in Drosophila Photoreceptors. Neuron, 2008, 59, 596-607.	8.1	28
28	The Mechanosensory Heart. , 2007, , 1-7.		1
29	Large Functional Variability in Cockroach Photoreceptors: Optimization to Low Light Levels. Journal of Neuroscience, 2006, 26, 13454-13462.	3.6	50
30	Robustness of Neural Coding in Drosophila Photoreceptors in the Absence of Slow Delayed Rectifier K+ Channels. Journal of Neuroscience, 2006, 26, 2652-2660.	3.6	61
31	Pacing-induced calcineurin activation controls cardiac Ca2+signalling and gene expression. Journal of Physiology, 2004, 554, 309-320.	2.9	51
32	K+Channels and Their Modulation by 5-HT in Drosophila Photoreceptors: A Modelling Study. Annals of Biomedical Engineering, 2004, 32, 1580-1595.	2.5	4
33	The contribution of Shaker K+ channels to the information capacity of Drosophila photoreceptors. Nature, 2003, 421, 630-634.	27.8	84
34	Calmodulin kinase modulates Ca2+ release in mouse skeletal muscle. Journal of Physiology, 2003, 551, 5-12.	2.9	34
35	Cardiac mechanotransduction: from sensing to disease and treatment. Trends in Pharmacological Sciences, 2001, 22, 254-260.	8.7	58
36	cAMP- and cGMP-independent stretch-induced changes in the contraction of rat atrium. Pflugers Archiv European Journal of Physiology, 2000, 441, 65-68.	2.8	5

#	Article	IF	Citations
37	Potentiation of stretch-induced atrial natriuretic peptide secretion by intracellular acidosis. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 277, H405-H412.	3.2	4
38	Information processing by graded-potential transmission through tonically active synapses. Trends in Neurosciences, 1996, 19, 292-297.	8.6	140
39	A digital feedback controller application for studying photoreceptor adaptation by â€˜voltage clamp by lightâ€™. Journal of Neuroscience Methods, 1995, 62, 29-36.	2.5	5
40	Visual ecology and voltage-gated ion channels in insect photoreceptors. Trends in Neurosciences, 1995, 18, 17-21.	8.6	119
41	TheRpa(Receptor Potential Absent) Visual Mutant of the Blowfly (Calliphora) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	1.4	7
42	A method for determining photoreceptor signal-to-noise ratio in the time and frequency domains with a pseudorandom stimulus. Visual Neuroscience, 1994, 11, 1221-1225.	1.0	23
43	Effect of ryanodine on atrial natriuretic peptide secretion by contracting and quiescent rat atrium. Pflugers Archiv European Journal of Physiology, 1994, 426, 276-283.	2.8	19
44	Band-pass filtering by voltage-dependent membrane in an insect photoreceptor. Neuroscience Letters, 1993, 154, 84-88.	2.1	37