

Fabrizio Gabbiani

List of Publications by Year in descending order

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Version: 2024-02-01

43
papers

2,667
citations

279798

23
h-index

276875

41
g-index

54
all docs

54
docs citations

54
times ranked

1798
citing authors

#	ARTICLE	IF	CITATIONS
1	Genetic and viral approaches to record or manipulate neurons in insects. <i>Current Opinion in Insect Science</i> , 2021, 48, 79-88.	4.4	4
2	Molecular characterization and distribution of the voltage-gated sodium channel, Para, in the brain of the grasshopper and vinegar fly. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2020, 206, 289-307.	1.6	6
3	Active membrane conductances and morphology of a collision detection neuron broaden its impedance profile and improve discrimination of input synchrony. <i>Journal of Neurophysiology</i> , 2019, 122, 691-706.	1.8	17
4	Collision Avoidance: Broadening the Toolkit for Directionally Selective Motion Computations. <i>Current Biology</i> , 2018, 28, R124-R126.	3.9	1
5	Combined Two-Photon Calcium Imaging and Single-Ommatidium Visual Stimulation to Study Fine-Scale Retinotopy in Insects. <i>NeuroMethods</i> , 2018, , 185-206.	0.3	1
6	Biophysics of object segmentation in a collision-detecting neuron. <i>ELife</i> , 2018, 7, .	6.0	23
7	Optogenetic manipulation of medullary neurons in the locust optic lobe. <i>Journal of Neurophysiology</i> , 2018, 120, 2049-2058.	1.8	9
8	Feedforward Inhibition Conveys Time-Varying Stimulus Information in a Collision Detection Circuit. <i>Current Biology</i> , 2018, 28, 1509-1521.e3.	3.9	15
9	Pre-synaptic Muscarinic Excitation Enhances the Discrimination of Looming Stimuli in a Collision-Detection Neuron. <i>Cell Reports</i> , 2018, 23, 2365-2378.	6.4	20
10	M current regulates firing mode and spike reliability in a collision-detecting neuron. <i>Journal of Neurophysiology</i> , 2018, 120, 1753-1764.	1.8	8
11	Linking dendritic processing to computation and behavior in invertebrates. , 2016, , 639-676.		1
12	Fine and distributed subcellular retinotopy of excitatory inputs to the dendritic tree of a collision-detecting neuron. <i>Journal of Neurophysiology</i> , 2016, 115, 3101-3112.	1.8	21
13	Complementary mechanisms create direction selectivity in the fly. <i>ELife</i> , 2016, 5, .	6.0	87
14	<i>Drosophila Neurobiology: No Escape from "Big Data"™ Science</i> . <i>Current Biology</i> , 2015, 25, R606-R608.	3.9	6
15	Near-Optimal Decoding of Transient Stimuli from Coupled Neuronal Subpopulations. <i>Journal of Neuroscience</i> , 2014, 34, 12206-12222.	3.6	5
16	Logarithmic Compression of Sensory Signals within the Dendritic Tree of a Collision-Sensitive Neuron. <i>Journal of Neuroscience</i> , 2012, 32, 4923-4934.	3.6	29
17	Impact of neural noise on a sensory-motor pathway signaling impending collision. <i>Journal of Neurophysiology</i> , 2012, 107, 1067-1079.	1.8	19
18	Force Measurements on Locusts during Visually-Evoked Collision Avoidance Maneuvers. <i>International Journal of Micro Air Vehicles</i> , 2012, 4, 227-249.	1.3	4

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19	Collision Detection as a Model for Sensory-Motor Integration. Annual Review of Neuroscience, 2011, 34, 1-19.	10.7	148
20	Multiplexing of Motor Information in the Discharge of a Collision Detecting Neuron during Escape Behaviors. Neuron, 2011, 69, 147-158.	8.1	117
21	A Genetic Push to Understand Motion Detection. Neuron, 2011, 70, 1023-1025.	8.1	8
22	Wireless Neural/EMG Telemetry Systems for Small Freely Moving Animals. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 103-111.	4.0	75
23	Spatiotemporal Receptive Field Properties of a Looming-Sensitive Neuron in Solitarious and Gregarious Phases of the Desert Locust. Journal of Neurophysiology, 2010, 103, 779-792.	1.8	33
24	Synchronized Neural Input Shapes Stimulus Selectivity in a Collision-Detecting Neuron. Current Biology, 2010, 20, 2052-2057.	3.9	47
25	A wireless neural/EMG telemetry system for freely moving insects. , 2010, , .		14
26	A Novel Neuronal Pathway for Visually Guided Escape in <i>Drosophila melanogaster</i> . Journal of Neurophysiology, 2009, 102, 875-885.	1.8	100
27	Role of spike-frequency adaptation in shaping neuronal response to dynamic stimuli. Biological Cybernetics, 2009, 100, 505-520.	1.3	44
28	Spike frequency adaptation mediates looming stimulus selectivity in a collision-detecting neuron. Nature Neuroscience, 2009, 12, 318-326.	14.8	122
29	Precise Subcellular Input Retinotopy and Its Computational Consequences in an Identified Visual Interneuron. Neuron, 2009, 63, 830-842.	8.1	50
30	Relationship between the Phases of Sensory and Motor Activity during a Looming-Evoked Multistage Escape Behavior. Journal of Neuroscience, 2007, 27, 10047-10059.	3.6	98
31	Influence of Electrotonic Structure and Synaptic Mapping on the Receptive Field Properties of a Collision-Detecting Neuron. Journal of Neurophysiology, 2007, 97, 159-177.	1.8	33
32	Spike-Frequency Adaptation and Intrinsic Properties of an Identified, Looming-Sensitive Neuron. Journal of Neurophysiology, 2006, 96, 2951-2962.	1.8	57
33	Spatial Distribution of Inputs and Local Receptive Field Properties of a Wide-Field, Looming Sensitive Neuron. Journal of Neurophysiology, 2005, 93, 2240-2253.	1.8	67
34	Time-Dependent Activation of Feed-Forward Inhibition in a Looming-Sensitive Neuron. Journal of Neurophysiology, 2005, 94, 2150-2161.	1.8	44
35	Burst firing in sensory systems. Nature Reviews Neuroscience, 2004, 5, 13-23.	10.2	389
36	Multiplication and stimulus invariance in a looming-sensitive neuron. Journal of Physiology (Paris), 2004, 98, 19-34.	2.1	65

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37	Interpolating between Cellular Biophysics and Computation in Single Neurons. <i>Neuron</i> , 2003, 37, 890-891.	8.1	2
38	Multiplicative computation in a visual neuron sensitive to looming. <i>Nature</i> , 2002, 420, 320-324.	27.8	351
39	Invariance of Angular Threshold Computation in a Wide-Field Looming-Sensitive Neuron. <i>Journal of Neuroscience</i> , 2001, 21, 314-329.	3.6	100
40	Robustness and Variability of Neuronal Coding by Amplitude-Sensitive Afferents in the Weakly Electric Fish <i>Eigenmannia</i> . <i>Journal of Neurophysiology</i> , 2000, 84, 189-204.	1.8	68
41	Computation of Object Approach by a Wide-Field, Motion-Sensitive Neuron. <i>Journal of Neuroscience</i> , 1999, 19, 1122-1141.	3.6	251
42	Coding of Time-Varying Signals in Spike Trains of Integrate-and-Fire Neurons with Random Threshold. <i>Neural Computation</i> , 1996, 8, 44-66.	2.2	63
43	Coding of time-varying signals in spike trains of linear and half-wave rectifying neurons. <i>Network: Computation in Neural Systems</i> , 1996, 7, 61-85.	3.6	37