Matthieu Louis

List of Publications by Year
in descending order

31	2,118	361045	500791
papers	citations	20 h-index	28 g-index

46	46	46	1905
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular Titration and Ultrasensitivity in Regulatory Networks. Journal of Molecular Biology, 2008, 384, 1106-1119.	2.0	248
2	Chemotaxis Behavior Mediated by Single Larval Olfactory Neurons in Drosophila. Current Biology, 2005, 15, 2086-2096.	1.8	224
3	Active sampling and decision making in Drosophila chemotaxis. Nature Communications, 2011, 2, 441.	5.8	214
4	The wiring diagram of a glomerular olfactory system. ELife, 2016, 5, .	2.8	178
5	Bilateral olfactory sensory input enhances chemotaxis behavior. Nature Neuroscience, 2008, 11, 187-199.	7.1	167
6	A circuit supporting concentration-invariant odor perception in Drosophila. Journal of Biology, 2009, 8, 9.	2.7	126
7	Algorithms for Olfactory Search across Species. Journal of Neuroscience, 2018, 38, 9383-9389.	1.7	117
8	Dynamical feature extraction at the sensory periphery guides chemotaxis. ELife, 2015, 4, .	2.8	107
9	Active sensation during orientation behavior in the Drosophila larva: more sense than luck. Current Opinion in Neurobiology, 2012, 22, 208-215.	2.0	86
10	Automated Tracking of Animal Posture and Movement during Exploration and Sensory Orientation Behaviors. PLoS ONE, 2012, 7, e41642.	1.1	76
11	Multilevel control of run orientation in Drosophila larval chemotaxis. Frontiers in Behavioral Neuroscience, 2014, 8, 38.	1.0	70
12	Role of the Subesophageal Zone in Sensorimotor Control of Orientation in Drosophila Larva. Current Biology, 2015, 25, 1448-1460.	1.8	63
13	Sensorimotor pathway controlling stopping behavior during chemotaxis in the Drosophila melanogaster larva. ELife, 2018, 7, .	2.8	53
14	Mechanisms of odor-tracking: multiple sensors for enhanced perception and behavior. Frontiers in Cellular Neuroscience, 2010, 4, 6.	1.8	52
15	The Ol1mpiad: concordance of behavioural faculties of stage 1 and stage 3Drosophilalarvae. Journal of Experimental Biology, 2017, 220, 2452-2475.	0.8	48
16	The impact of odorâ€“reward memory on chemotaxis in larval Drosophila. Learning and Memory, 2015, 22, 267-277.	0.5	41
17	Species-specific modulation of food-search behavior by respiration and chemosensation in Drosophila larvae. ELife, 2017, 6, .	2.8	31
18	Pavlovian Conditioning of Larval Drosophila: An Illustrated, Multilingual, Hands-On Manual for Odor-Taste Associative Learning in Maggots. Frontiers in Behavioral Neuroscience, 2017, 11, 45.	1.0	28

#	Article	IF	Citations
19	PiVR: An affordable and versatile closed-loop platform to study unrestrained sensorimotor behavior. PLoS Biology, 2020, 18, e3000712.	2.6	27
20	Adaptive Adjustment of the Generalization-Discrimination Balance in LarvalDrosophila. Journal of Neurogenetics, 2010, 24, 168-175.	0.6	25
21	A Model of Drosophila Larva Chemotaxis. PLoS Computational Biology, 2015, 11, e1004606.	1.5	24
22	High-resolution Measurement of Odor-Driven Behavior in Drosophila Larvae. Journal of Visualized Experiments, 2008, , .	0.2	21
23	A Theoretical Model for the Regulation of Sex-lethal, a Gene That Controls Sex Determination and Dosage Compensation in Drosophila melanogaster. Genetics, 2003, 165, 1355-1384.	1.2	21
24	Behavioral Neuroscience: Crawling IsÂa No-Brainer for Fruit Fly Larvae. Current Biology, 2012, 22, R867-R869.	1.8	19
25	Collective Behavior: Social Digging in Drosophila Larvae. Current Biology, 2017, 27, R1010-R1012.	1.8	16
26	Mini-brain computations converting dynamic olfactory inputs into orientation behavior. Current Opinion in Neurobiology, 2020, 64, 1-9.	2.0	9
27	Disentangling the strings that organize behavior. ELife, 2018, 7, .	2.8	3
28	Manipulation of Neural Circuits in Drosophila Larvae. , 2017, , 171-189.		2
29	Order in Odors: A Power Law Structures the Encoding of Stimulus Identity and Intensity. Neuron, 2019, 101, 768-770.	3.8	1
30	Behavioral Analysis of Navigation Behaviors in the Drosophila Larva. Neuromethods, 2012, , 163-199.	0.2	0
31	Action selection: Neuropeptidergic gates of behavior. Current Biology, 2022, 32, R39-R42.	1.8	0