Bruno van Swinderen

List of Publications by Year
in descending order

99 papers	4,003 citations	136950 32 h-index	144013 57 g-index
111 all docs	111 docs citations	111 times ranked	2979 citing authors

#	Article	IF	Citations
1	Dopaminergic Modulation of Arousal in Drosophila. Current Biology, 2005, 15, 1165-1175.	3.9	333
2	Quantitative Trait Loci for Murine Growth. Genetics, 1996, 142, 1305-1319.	2.9	300
3	Electrophysiological Correlates of Rest and Activity in Drosophila melanogaster. Current Biology, 2002, 12, 1934-1940.	3.9	248
4	A Dynamic Deep Sleep Stage inDrosophila. Journal of Neuroscience, 2013, 33, 6917-6927.	3.6	195
5	Salience modulates 20â€“30 Hz brain activity in Drosophila. Nature Neuroscience, 2003, 6, 579-586.	14.8	175
6	Sleep Restores Behavioral Plasticity to Drosophila Mutants. Current Biology, 2015, 25, 1270-1281.	3.9	116
7	Dopamine in Drosophila : setting arousal thresholds in a miniature brain. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 906-913.	2.6	115
8	FicTrac: A visual method for tracking spherical motion and generating fictive animal paths. Journal of Neuroscience Methods, 2014, 225, 106-119.	2.5	108
9	Oscillatory brain activity in spontaneous and induced sleep stages in flies. Nature Communications, 2017, 8, 1815.	12.8	103
10	A neomorphic syntaxin mutation blocks volatile-anesthetic action in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 2479-2484.	7.1	100
11	Flexibility in a Gene Network Affecting a Simple Behavior in Drosophila melanogaster. Genetics, 2005, 169, 2151-2163.	2.9	97
12	Attention-Like Processes in Drosophila Require Short-Term Memory Genes. Science, 2007, 315, 1590-1593.	12.6	96
13	Selective attention in the honeybee optic lobes precedes behavioral choices. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5006-5011.	7.1	81
14	Vision in Drosophila: Seeing the World Through a Model's Eyes. Annual Review of Entomology, 2013, 58, 313-332.	11.8	79
15	Drosophila strategies to study psychiatric disorders. Brain Research Bulletin, 2013, 92, 1-11.	3.0	67
16	The Yin and Yang of Sleep and Attention. Trends in Neurosciences, 2015, 38, 776-786.	8.6	62
17	Big ideas for small brains: what can psychiatry learn from worms, flies, bees and fish?. Molecular Psychiatry, 2011, 16, 7-16.	7.9	59
18	Flux of signalling endosomes undergoing axonal retrograde transport is encoded by presynaptic activity and TrkB. Nature Communications, 2016, 7, 12976.	12.8	59

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19	Cognitive consonance: complex brain functions in the fruit fly and its relatives. Trends in Neurosciences, 2004, 27, 707-711.	8.6	57
20	A Sleep/Wake Circuit Controls Isoflurane Sensitivity in Drosophila. Current Biology, 2013, 23, 594-598.	3.9	56
21	In vivo single-molecule imaging of syntaxin1A reveals polyphosphoinositide- and activity-dependent trapping in presynaptic nanoclusters. Nature Communications, 2016, 7, 13660.	12.8	55
22	Evidence for selective attention in the insect brain. Current Opinion in Insect Science, 2016, 15, 9-15.	4.4	55
23	Attention-Like Deficit and Hyperactivity in aDrosophilaMemory Mutant. Journal of Neuroscience, 2010, 30, 1003-1014.	3.6	52
24	A deep sleep stage in Drosophila with a functional role in waste clearance. Science Advances, 2021, 7, .	10.3	51
25	The remote roots of consciousness in fruit-fly selective attention?. BioEssays, 2005, 27, 321-330.	2.5	49
26	Closed-Loop Behavioral Control Increases Coherence in the Fly Brain. Journal of Neuroscience, 2015, 35, 10304-10315.	3.6	48
27	Shared Visual Attention and Memory Systems in the Drosophila Brain. PLoS ONE, 2009, 4, e5989.	2.5	48
28	Enhanced sleep reverses memory deficits and underlying pathology in drosophila models of Alzheimer's disease. Neurobiology of Sleep and Circadian Rhythms, 2017, 2, 15-26.	2.8	47
29	A Paradoxical Kind of Sleep in Drosophila melanogaster. Current Biology, 2021, 31, 578-590.e6.	3.9	47
30	Wolbachia Influences the Production of Octopamine and Affects Drosophila Male Aggression. Applied and Environmental Microbiology, 2015, 81, 4573-4580.	3.1	46
31	Trapping of Syntaxin1a in Presynaptic Nanoclusters by a Clinically Relevant General Anesthetic. Cell Reports, 2018, 22, 427-440.	6.4	45
32	Attention in Drosophila. International Review of Neurobiology, 2011, 99, 51-85.	2.0	42
33	Arousal in Drosophila. Behavioural Processes, 2003, 64, 133-144.	1.1	37
34	Multichannel brain recordings in behavingDrosophilareveal oscillatory activity and local coherence in response to sensory stimulation and circuit activation. Journal of Neurophysiology, 2013, 110, 1703-1721.	1.8	34
35	Attention-like processes underlying optomotor performance in aDrosophilachoice maze. Developmental Neurobiology, 2007, 67, 129-145.	3.0	33
36	Competing visual flicker reveals attention-like rivalry in the fly brain. Frontiers in Integrative Neuroscience, 2012, 6, 96.	2.1	32

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37	Goî± Regulates Volatile Anesthetic Action in Caenorhabditis elegans. Genetics, 2001, 158, 643-655.	2.9	32
38	Acute control of the sleep switch in Drosophila reveals a role for gap junctions in regulating behavioral responsiveness. ELife, 2018, 7, .	6.0	32
39	A succession of anesthetic endpoints in theDrosophilabrain. Journal of Neurobiology, 2006, 66, 1195-1211.	3.6	30
40	Quantitative trait loci controlling halothane sensitivity in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 8232-8237.	7.1	29
41	Neurexinâ€1 regulates sleep and synaptic plasticity inÂDrosophila melanogaster. European Journal of Neuroscience, 2015, 42, 2455-2466.	2.6	28
42	Attentional Switching in Humans and Flies: Rivalry in Large and Miniature Brains. Frontiers in Human Neuroscience, 2011, 5, 188.	2.0	27
43	Syntaxin1A-mediated Resistance and Hypersensitivity to Isoflurane in Drosophila melanogaster. Anesthesiology, 2015, 122, 1060-1074.	2.5	27
44	Explaining general anesthesia: A twoâ€step hypothesis linking sleep circuits and the synaptic release machinery. BioEssays, 2014, 36, 372-381.	2.5	25
45	Insects modify their behaviour depending on the feedback sensor used when walking on a trackball in virtual-reality. Journal of Experimental Biology, 2015, 218, 3118-27.	1.7	24
46	What is unconsciousness in a fly or a worm? A review of general anesthesia in different animal models. Consciousness and Cognition, 2016, 44, 72-88.	1.5	22
47	Transient Dysregulation of Dopamine Signaling in a Developing Drosophila Arousal Circuit Permanently Impairs Behavioral Responsiveness in Adults. Frontiers in Psychiatry, 2017, 8, 22.	2.6	22
48	Analysis of conditioned courtship in dusky-Andante rhythm mutants of Drosophila.. Learning and Memory, 1995, 2, 49-61.	1.3	21
49	Intensity of Mutualism Breakdown Is Determined by Temperature Not Amplification of Wolbachia Genes. PLoS Pathogens, 2016, 12, e1005888.	4.7	21
50	Isoflurane Impairs Low-Frequency Feedback but Leaves High-Frequency Feedforward Connectivity Intact in the Fly Brain. ENeuro, 2018, 5, ENEURO.0329-17.2018.	1.9	21
51	Sleep regulates visual selective attention in Drosophila. Journal of Experimental Biology, 2018, 221, .	1.7	19
52	Transient activation of dopaminergic neurons during development modulates visual responsiveness, locomotion and brain activity in a dopamine ontogeny model of schizophrenia. Translational Psychiatry, 2013, 3, e206-e206.	4.8	18
53	Local Versus Global Effects of Isoflurane Anesthesia on Visual Processing in the Fly Brain. ENeuro, 2016, 3, ENEURO.0116-16.2016.	1.9	18
54	Fly Memory: A Mushroom Body Story in Parts. Current Biology, 2009, 19, R855-R857.	3.9	17

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55	Visual experience drives sleep need in Drosophila. Sleep, 2019, 42, .	1.1	17
56	General anesthesia reduces complexity and temporal asymmetry of the informational structures derived from neural recordings inDrosophila. Physical Review Research, 2020, 2, .	3.6	17
57	Oscillations in the central brain of Drosophila are phase locked to attended visual features. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29925-29936.	7.1	16
58	A conserved role for sleep in supporting Spatial Learning in Drosophila. Sleep, 2021, 44, .	1.1	16
59	A Caenorhabditis elegans Pheromone Antagonizes Volatile Anesthetic Action Through a Go-Coupled Pathway. Genetics, 2002, 161, 109-119.	2.9	16
60	Using an abstract geometry in virtual reality to explore choice behaviour: visual flicker preferences in honeybees. Journal of Experimental Biology, 2015, 218, 3448-60.	1.7	15
61	Integrated information structure collapses with anesthetic loss of conscious arousal in Drosophila melanogaster. PLoS Computational Biology, 2021, 17, e1008722.	3.2	15
62	Syntaxin1A Neomorphic Mutations Promote Rapid Recovery from Isoflurane Anesthesia in Drosophila melanogaster. Anesthesiology, 2019, 131, 555-568.	2.5	14
63	Proportional Downscaling of Glutamatergic Release Sites by the General Anesthetic Propofol atDrosophilaMotor Nerve Terminals. ENeuro, 2020, 7, ENEURO.0422-19.2020.	1.9	13
64	Behavioral and electrophysiological analysis of general anesthesia in 3 background strains ofDrosophila melanogaster. Fly, 2015, 9, 7-15.	1.7	12
65	In Vivo Single-Molecule Tracking at the Drosophila Presynaptic Motor Nerve Terminal. Journal of Visualized Experiments, 2018, , .	0.3	10
66	Innate visual preferences and behavioral flexibility inDrosophila. Journal of Experimental Biology, 2018, 221, .	1.7	10
67	Down-regulation of a cytokine secreted from peripheral fat bodies improves visual attention while reducing sleep in Drosophila. PLoS Biology, 2020, 18, e3000548.	5.6	10
68	Common Genetic Determinants of Halothane and Isoflurane Potencies in Caenorhabditis elegansÂ. Anesthesiology, 1998, 89, 1509-1517.	2.5	9
69	An Automated Paradigm for Drosophila Visual Psychophysics. PLoS ONE, 2011, 6, e21619.	2.5	9
70	The Attention Span of a Fly. Fly, 2007, 1, 187-189.	1.7	8
71	Dscam2 affects visual perception in Drosophila melanogaster. Frontiers in Behavioral Neuroscience, 2015, 9, 149.	2.0	8
72	Identification of neurons responsible for feeding behavior in the Drosophila brain. Science China Life Sciences, 2014, 57, 391-402.	4.9	7

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73	Perceptual rivalry across animal species. Journal of Comparative Neurology, 2020, 528, 3123-3133.	1.6	7
74	Balancing Prediction and Surprise: A Role for Active Sleep at the Dawn of Consciousness?. Frontiers in Systems Neuroscience, 2021, 15, 768762.	2.5	7
75	Sleep in Drosophila. Handbook of Behavioral Neuroscience, 2019, 30, 333-347.	0.7	6
76	Activity-Dependent Global Downscaling of Evoked Neurotransmitter Release across Glutamatergic Inputs inDrosophila. Journal of Neuroscience, 2020, 40, 8025-8041.	3.6	6
77	Using Drosophila to Understand General Anesthesia: From Synapses to Behavior. Methods in Enzymology, 2018, 602, 153-176.	1.0	5
78	Sleep restores place learning to the adenylyl cyclase mutant rutabaga. Journal of Neurogenetics, 2020, 34, 83-91.	1.4	5
79	Response to: Comment on Rohrscheib et al. 2016 "Intensity of mutualism breakdown is determined by temperature not amplification of Wolbachia genes". PLoS Pathogens, 2017, 13, e1006521.	4.7	5
80	A quantitative genetic approach towards volatile anesthetic mechanisms in C. elegans. Toxicology Letters, 1998, 100-101, 309-317.	0.8	4
81	The Aversive Phototaxic Suppression Assay for Individual Adult Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot065896-pdb.prot065896.	0.3	4
82	Tracking Single Molecule Dynamics in the AdultDrosophilaBrain. ENeuro, 2021, 8, ENEURO.0057-21.2021.	1.9	4
83	Turning to Drosophila for help in resolving general anesthesia. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24627-24628.	7.1	3
84	An Assay for Visual Learning in Individual Drosophila Larvae. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot065888-pdb.prot065888.	0.3	2
85	Attention-like processes underlying optomotor performance in aDrosophila choice maze. Journal of Neurobiology, 2006, 67, 129.	3.6	2
86	Taking a new look at how flies learn. ELife, 2014, 3, e03978.	6.0	2
87	Conditioning to Colors: A Population Assay for Visual Learning in Drosophila: Figure 1.. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066522.	0.3	1
88	The Optomotor Maze: A Population Assay for Visual Perception in Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066530-pdb.prot066530.	0.3	1
89	Single Fly Tethered Paradigms. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066910.	0.3	1
90	Slamdance: seizing a fly model for epilepsy. Journal of Neurophysiology, 2011, 106, 15-17.	1.8	0

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91	The Remote Roots of Consciousness in Fruit-fly Selective Attention?â€â€œThe remote roots of consciousness in fruit-fly selective attentionâ€•by Bruno van Swinderen appeared in BioEssays 27:321-330 (2005). Reprinted with permission of Wiley-Liss, Inc., a subsidiary of John Wiley & Sons, Inc.. , 2007. , 27-44.		0
92	Title is missing!. , 2020, 18, e3000548.		0
93	Title is missing!. , 2020, 18, e3000548.		0
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