# 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 | A conserved role for sleep in supporting Spatial Learning in <i>Drosophila</i>. Sleep, 2021, 44, . | 1.1 | 16 |
| 2 | Integrated information structure collapses with anesthetic loss of conscious arousal in Drosophila melanogaster. PLoS Computational Biology, 2021, 17, e1008722. | 3.2 | 15 |
| 3 | A Paradoxical Kind of Sleep in Drosophila melanogaster. Current Biology, 2021, 31, 578-590.e6. | 3.9 | 47 |
| 4 | Tracking Single Molecule Dynamics in the Adult<i>Drosophila</i>Brain. ENeuro, 2021, 8, ENEURO.0057-21.2021. | 1.9 | 4 |
| 5 | A deep sleep stage in <i>Drosophila</i> with a functional role in waste clearance. Science Advances, 2021, 7, . | 10.3 | 51 |
| 6 | Balancing Prediction and Surprise: A Role for Active Sleep at the Dawn of Consciousness?. Frontiers in Systems Neuroscience, 2021, 15, 768762. | 2.5 | 7 |
| 7 | Oscillations in the central brain of <i>Drosophila</i> 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 |
| 8 | 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 |
| 9 | Activity-Dependent Global Downscaling of Evoked Neurotransmitter Release across Glutamatergic Inputs in<i>Drosophila</i>. Journal of Neuroscience, 2020, 40, 8025-8041. | 3.6 | 6 |
| 10 | Perceptual rivalry across animal species. Journal of Comparative Neurology, 2020, 528, 3123-3133. | 1.6 | 7 |
| 11 | Sleep restores place learning to the adenylyl cyclase mutant <i>rutabaga</i>. Journal of Neurogenetics, 2020, 34, 83-91. | 1.4 | 5 |
| 12 | General anesthesia reduces complexity and temporal asymmetry of the informational structures derived from neural recordings in<i>Drosophila</i>. Physical Review Research, 2020, 2, . | 3.6 | 17 |
| 13 | Proportional Downscaling of Glutamatergic Release Sites by the General Anesthetic Propofol at<i>Drosophila</i>Motor Nerve Terminals. ENeuro, 2020, 7, ENEURO.0422-19.2020. | 1.9 | 13 |
| 14 | Turning to <i>Drosophila</i> 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 |
| 15 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 16 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 17 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 18 | Title is missing!. , 2020, 18, e3000548. | | 0 |

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| 19 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 20 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 21 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 22 | Title is missing!. , 2020, 18, e3000548. | | 0 |
| 23 | Sleep in Drosophila. Handbook of Behavioral Neuroscience, 2019, 30, 333-347. | 0.7 | 6 |
| 24 | Visual experience drives sleep need in Drosophila. Sleep, 2019, 42, . | 1.1 | 17 |
| 25 | Syntaxin1A Neomorphic Mutations Promote Rapid Recovery from Isoflurane Anesthesia in <i>Drosophila melanogaster</i>. Anesthesiology, 2019, 131, 555-568. | 2.5 | 14 |
| 26 | Trapping of Syntaxin1a in Presynaptic Nanoclusters by a Clinically Relevant General Anesthetic. Cell Reports, 2018, 22, 427-440. | 6.4 | 45 |
| 27 | <em>In Vivo</em> Single-Molecule Tracking at the Drosophila Presynaptic Motor Nerve Terminal. Journal of Visualized Experiments, 2018, , . | 0.3 | 10 |
| 28 | Using Drosophila to Understand General Anesthesia: From Synapses to Behavior. Methods in Enzymology, 2018, 602, 153-176. | 1.0 | 5 |
| 29 | Sleep regulates visual selective attention in <i>Drosophila</i>. Journal of Experimental Biology, 2018, 221, . | 1.7 | 19 |
| 30 | Innate visual preferences and behavioral flexibility in<i>Drosophila</i>. Journal of Experimental Biology, 2018, 221, . | 1.7 | 10 |
| 31 | 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 |
| 32 | Acute control of the sleep switch in Drosophila reveals a role for gap junctions in regulating behavioral responsiveness. ELife, 2018, 7, . | 6.0 | 32 |
| 33 | Oscillatory brain activity in spontaneous and induced sleep stages in flies. Nature Communications, 2017, 8, 1815. | 12.8 | 103 |
| 34 | 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 |
| 35 | 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 |
| 36 | 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 |

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|---|---|---|---|
| 37 | Flux of signalling endosomes undergoing axonal retrograde transport is encoded by presynaptic activity and TrkB. Nature Communications, 2016, 7, 12976. | 12.8 | 59 |
| 38 | In vivo single-molecule imaging of syntaxin1A reveals polyphosphoinositide- and activity-dependent trapping in presynaptic nanoclusters. Nature Communications, 2016, 7, 13660. | 12.8 | 55 |
| 39 | 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 |
| 40 | Evidence for selective attention in the insect brain. Current Opinion in Insect Science, 2016, 15, 9-15. | 4.4 | 55 |
| 41 | Intensity of Mutualism Breakdown Is Determined by Temperature Not Amplification of Wolbachia Genes. PLoS Pathogens, 2016, 12, e1005888. | 4.7 | 21 |
| 42 | Local Versus Global Effects of Isoflurane Anesthesia on Visual Processing in the Fly Brain. ENeuro, 2016, 3, ENEURO.0116-16.2016. | 1.9 | 18 |
| 43 | Neurexinâ€1 regulates sleep and synaptic plasticity inÂ<i>Drosophila melanogaster</i>. European Journal of Neuroscience, 2015, 42, 2455-2466. | 2.6 | 28 |
| 44 | Syntaxin1A-mediated Resistance and Hypersensitivity to Isoflurane in <i>Drosophila melanogaster</i>. Anesthesiology, 2015, 122, 1060-1074. | 2.5 | 27 |
| 45 | Dscam2 affects visual perception in Drosophila melanogaster. Frontiers in Behavioral Neuroscience, 2015, 9, 149. | 2.0 | 8 |
| 46 | Closed-Loop Behavioral Control Increases Coherence in the Fly Brain. Journal of Neuroscience, 2015, 35, 10304-10315. | 3.6 | 48 |
| 47 | Sleep Restores Behavioral Plasticity to Drosophila Mutants. Current Biology, 2015, 25, 1270-1281. | 3.9 | 116 |
| 48 | Wolbachia Influences the Production of Octopamine and Affects Drosophila Male Aggression. Applied and Environmental Microbiology, 2015, 81, 4573-4580. | 3.1 | 46 |
| 49 | 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 |
| 50 | 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 |
| 51 | The Yin and Yang of Sleep and Attention. Trends in Neurosciences, 2015, 38, 776-786. | 8.6 | 62 |
| 52 | Behavioral and electrophysiological analysis of general anesthesia in 3 background strains of<i>Drosophila melanogaster</i>. Fly, 2015, 9, 7-15. | 1.7 | 12 |
| 53 | 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 |
| 54 | Explaining general anesthesia: A twoâ€step hypothesis linking sleep circuits and the synaptic release machinery. BioEssays, 2014, 36, 372-381. | 2.5 | 25 |

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|---|---|---|---|
| 55 | Identification of neurons responsible for feeding behavior in the Drosophila brain. Science China Life Sciences, 2014, 57, 391-402. | 4.9 | 7 |
| 56 | FicTrac: A visual method for tracking spherical motion and generating fictive animal paths. Journal of Neuroscience Methods, 2014, 225, 106-119. | 2.5 | 108 |
| 57 | Taking a new look at how flies learn. ELife, 2014, 3, e03978. | 6.0 | 2 |
| 58 | Drosophila strategies to study psychiatric disorders. Brain Research Bulletin, 2013, 92, 1-11. | 3.0 | 67 |
| 59 | A Dynamic Deep Sleep Stage in<i>Drosophila</i>. Journal of Neuroscience, 2013, 33, 6917-6927. | 3.6 | 195 |
| 60 | A Sleep/Wake Circuit Controls Isoflurane Sensitivity in Drosophila. Current Biology, 2013, 23, 594-598. | 3.9 | 56 |
| 61 | Vision in <i>Drosophila</i>: Seeing the World Through a Model's Eyes. Annual Review of Entomology, 2013, 58, 313-332. | 11.8 | 79 |
| 62 | Multichannel brain recordings in behaving<i>Drosophila</i>reveal oscillatory activity and local coherence in response to sensory stimulation and circuit activation. Journal of Neurophysiology, 2013, 110, 1703-1721. | 1.8 | 34 |
| 63 | 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 |
| 64 | Competing visual flicker reveals attention-like rivalry in the fly brain. Frontiers in Integrative Neuroscience, 2012, 6, 96. | 2.1 | 32 |
| 65 | Dopamine in <i>Drosophila</i> : setting arousal thresholds in a miniature brain. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 906-913. | 2.6 | 115 |
| 66 | Conditioning to Colors: A Population Assay for Visual Learning in <i>Drosophila</i>: Figure 1.. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066522. | 0.3 | 1 |
| 67 | Big ideas for small brains: what can psychiatry learn from worms, flies, bees and fish?. Molecular Psychiatry, 2011, 16, 7-16. | 7.9 | 59 |
| 68 | Attention in Drosophila. International Review of Neurobiology, 2011, 99, 51-85. | 2.0 | 42 |
| 69 | An Assay for Visual Learning in Individual Drosophila Larvae. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot065888-pdb.prot065888. | 0.3 | 2 |
| 70 | The Optomotor Maze: A Population Assay for Visual Perception in Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066530-pdb.prot066530. | 0.3 | 1 |
| 71 | Single Fly Tethered Paradigms. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066910. | 0.3 | 1 |
| 72 | The Aversive Phototaxic Suppression Assay for Individual Adult Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot065896-pdb.prot065896. | 0.3 | 4 |

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|---|---|---|---|
| 73 | <i>Slamdance</i>: seizing a fly model for epilepsy. Journal of Neurophysiology, 2011, 106, 15-17. | 1.8 | 0 |
| 74 | Attentional Switching in Humans and Flies: Rivalry in Large and Miniature Brains. Frontiers in Human Neuroscience, 2011, 5, 188. | 2.0 | 27 |
| 75 | An Automated Paradigm for Drosophila Visual Psychophysics. PLoS ONE, 2011, 6, e21619. | 2.5 | 9 |
| 76 | Attention-Like Deficit and Hyperactivity in a<i>Drosophila</i>Memory Mutant. Journal of Neuroscience, 2010, 30, 1003-1014. | 3.6 | 52 |
| 77 | Fly Memory: A Mushroom Body Story in Parts. Current Biology, 2009, 19, R855-R857. | 3.9 | 17 |
| 78 | Shared Visual Attention and Memory Systems in the Drosophila Brain. PLoS ONE, 2009, 4, e5989. | 2.5 | 48 |
| 79 | The Attention Span of a Fly. Fly, 2007, 1, 187-189. | 1.7 | 8 |
| 80 | Attention-Like Processes in Drosophila Require Short-Term Memory Genes. Science, 2007, 315, 1590-1593. | 12.6 | 96 |
| 81 | Attention-like processes underlying optomotor performance in aDrosophilachoice maze. Developmental Neurobiology, 2007, 67, 129-145. | 3.0 | 33 |
| 82 | The Remote Roots of Consciousness in Fruit-fly Selective Attention?â€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 |
| 83 | A succession of anesthetic endpoints in theDrosophilabrain. Journal of Neurobiology, 2006, 66, 1195-1211. | 3.6 | 30 |
| 84 | Attention-like processes underlying optomotor performance in aDrosophila choice maze. Journal of Neurobiology, 2006, 67, 129. | 3.6 | 2 |
| 85 | Dopaminergic Modulation of Arousal in Drosophila. Current Biology, 2005, 15, 1165-1175. | 3.9 | 333 |
| 86 | The remote roots of consciousness in fruit-fly selective attention?. BioEssays, 2005, 27, 321-330. | 2.5 | 49 |
| 87 | Flexibility in a Gene Network Affecting a Simple Behavior in Drosophila melanogaster. Genetics, 2005, 169, 2151-2163. | 2.9 | 97 |
| 88 | Cognitive consonance: complex brain functions in the fruit fly and its relatives. Trends in Neurosciences, 2004, 27, 707-711. | 8.6 | 57 |
| 89 | Salience modulates 20â€“30 Hz brain activity in Drosophila. Nature Neuroscience, 2003, 6, 579-586. | 14.8 | 175 |
| 90 | Arousal in Drosophila. Behavioural Processes, 2003, 64, 133-144. | 1.1 | 37 |

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|---|---|---|---|
| 91 | Electrophysiological Correlates of Rest and Activity in Drosophila melanogaster. Current Biology, 2002, 12, 1934-1940. | 3.9 | 248 |
| 92 | A <i>Caenorhabditis elegans</i> Pheromone Antagonizes Volatile Anesthetic Action Through a Go-Coupled Pathway. Genetics, 2002, 161, 109-119. | 2.9 | 16 |
| 93 | GoÎ± Regulates Volatile Anesthetic Action in Caenorhabditis elegans. Genetics, 2001, 158, 643-655. | 2.9 | 32 |
| 94 | 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 |
| 95 | A quantitative genetic approach towards volatile anesthetic mechanisms in C. elegans. Toxicology Letters, 1998, 100-101, 309-317. | 0.8 | 4 |
| 96 | Common Genetic Determinants of Halothane and Isoflurane Potencies in Caenorhabditis elegansÂ. Anesthesiology, 1998, 89, 1509-1517. | 2.5 | 9 |
| 97 | 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 |
| 98 | Quantitative Trait Loci for Murine Growth. Genetics, 1996, 142, 1305-1319. | 2.9 | 300 |
| 99 | Analysis of conditioned courtship in dusky-Andante rhythm mutants of Drosophila.. Learning and Memory, 1995, 2, 49-61. | 1.3 | 21 |