# Patrik Verstreken

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4824591/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 126 papers | 14,427 citations | 23500 58 h-index | 21474 114 g-index |
| 139 all docs | 139 docs citations | 139 times ranked | 19430 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Guidelines for the use and interpretation of assays for monitoring autophagy (4th) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 742 Td | 4.3 | 1,430 |
| 2 | Synaptic Mitochondria Are Critical for Mobilization of Reserve Pool Vesicles at Drosophila Neuromuscular Junctions. Neuron, 2005, 47, 365-378. | 3.8 | 734 |
| 3 | A Single-Cell Transcriptome Atlas of the Aging Drosophila Brain. Cell, 2018, 174, 982-998.e20. | 13.5 | 616 |
| 4 | Variants of the elongator protein 3 ( ELP3 ) gene are associated with motor neuron degeneration. Human Molecular Genetics, 2009, 18, 472-481. | 1.4 | 512 |
| 5 | Loss of Skywalker Reveals Synaptic Endosomes as Sorting Stations for Synaptic Vesicle Proteins. Cell, 2011, 145, 117-132. | 13.5 | 445 |
| 6 | Drosophila parkin mutants have decreased mass and cell size and increased sensitivity to oxygen radical stress. Development (Cambridge), 2004, 131, 2183-2194. | 1.2 | 387 |
| 7 | Synaptojanin Is Recruited by Endophilin to Promote Synaptic Vesicle Uncoating. Neuron, 2003, 40, 733-748. | 3.8 | 376 |
| 8 | Parkinson's disease mutations in PINK1 result in decreased Complex I activity and deficient synaptic function. EMBO Molecular Medicine, 2009, 1, 99-111. | 3.3 | 360 |
| 9 | WASP is activated by phosphatidylinositol-4,5-bisphosphate to restrict synapse growth in a pathway parallel to bone morphogenetic protein signaling. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17379-17384. | 3.3 | 325 |
| 10 | LRRK2 Controls an EndoA Phosphorylation Cycle in Synaptic Endocytosis. Neuron, 2012, 75, 1008-1021. | 3.8 | 312 |
| 11 | Endophilin Mutations Block Clathrin-Mediated Endocytosis but Not Neurotransmitter Release. Cell, 2002, 109, 101-112. | 13.5 | 305 |
| 12 | Vitamin K <sub>2</sub> Is a Mitochondrial Electron Carrier That Rescues Pink1 Deficiency. Science, 2012, 336, 1306-1310. | 6.0 | 304 |
| 13 | Shar-pei mediates cell proliferation arrest during imaginal disc growth inDrosophila. Development (Cambridge), 2002, 129, 5719-5730. | 1.2 | 302 |
| 14 | PINK1 Loss-of-Function Mutations Affect Mitochondrial Complex I Activity via NdufA10 Ubiquinone Uncoupling. Science, 2014, 344, 203-207. | 6.0 | 300 |
| 15 | The v-ATPase V 0 Subunit a1 Is Required for a Late Step in Synaptic Vesicle Exocytosis in Drosophila. Cell, 2005, 121, 607-620. | 13.5 | 297 |
| 16 | Tau association with synaptic vesicles causes presynaptic dysfunction. Nature Communications, 2017, 8, 15295. | 5.8 | 289 |
| 17 | The deubiquitinase USP15 antagonizes Parkin-mediated mitochondrial ubiquitination and mitophagy. Human Molecular Genetics, 2014, 23, 5227-5242. | 1.4 | 264 |
| 18 | Dap160/Intersectin Acts as a Stabilizing Scaffold Required for Synaptic Development and Vesicle Endocytosis. Neuron, 2004, 43, 193-205. | 3.8 | 225 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Drosophila Fragile X Protein, DFXR, Regulates Neuronal Morphology and Function in the Brain. Neuron, 2002, 34, 961-972. | 3.8 | 215 |
| 20 | Synaptic mitochondria in synaptic transmission and organization of vesicle pools in health and disease. Frontiers in Synaptic Neuroscience, 2010, 2, 139. | 1.3 | 206 |
| 21 | Synaptic Contacts Enhance Cell-to-Cell Tau Pathology Propagation. Cell Reports, 2015, 11, 1176-1183. | 2.9 | 206 |
| 22 | Loss of Bin1 Promotes the Propagation of Tau Pathology. Cell Reports, 2016, 17, 931-940. | 2.9 | 206 |
| 23 | A LRRK2-Dependent EndophilinA Phosphoswitch Is Critical for Macroautophagy at Presynaptic Terminals. Neuron, 2016, 92, 829-844. | 3.8 | 202 |
| 24 | Mitochondria at the Synapse. Neuroscientist, 2006, 12, 291-299. | 2.6 | 180 |
| 25 | The <scp>SAC</scp>1 domain in synaptojanin is required forÂautophagosome maturation at presynapticÂterminals. EMBO Journal, 2017, 36, 1392-1411. | 3.5 | 174 |
| 26 | Deficiency of parkin and PINK1 impairs age-dependent mitophagy in Drosophila. ELife, 2018, 7, . | 2.8 | 167 |
| 27 | Drosophila NMNAT Maintains Neural Integrity Independent of Its NAD Synthesis Activity. PLoS Biology, 2006, 4, e416. | 2.6 | 160 |
| 28 | Membrane Lipids in Presynaptic Function and Disease. Neuron, 2016, 90, 11-25. | 3.8 | 158 |
| 29 | Synaptogyrin-3 Mediates Presynaptic Dysfunction Induced by Tau. Neuron, 2018, 97, 823-835.e8. | 3.8 | 151 |
| 30 | Autophagy in the presynaptic compartment in health and disease. Journal of Cell Biology, 2017, 216, 1895-1906. | 2.3 | 148 |
| 31 | Suppression of Neurodegeneration and Increased Neurotransmission Caused by Expanded Full-Length Huntingtin Accumulating in the Cytoplasm. Neuron, 2008, 57, 27-40. | 3.8 | 143 |
| 32 | Hsc70-4 Deforms Membranes to Promote Synaptic Protein Turnover by Endosomal Microautophagy. Neuron, 2015, 88, 735-748. | 3.8 | 140 |
| 33 | LRRK2 functions in synaptic vesicle endocytosis through a kinase-dependent mechanism. Journal of Cell Science, 2015, 128, 541â€“52. | 1.2 | 134 |
| 34 | Mutations in Drosophila sec15 Reveal a Function in Neuronal Targeting for a Subset of Exocyst Components. Neuron, 2005, 46, 219-232. | 3.8 | 129 |
| 35 | Aberrant lysosomal carbohydrate storage accompanies endocytic defects and neurodegeneration in Drosophila benchwarmer. Journal of Cell Biology, 2005, 170, 127-139. | 2.3 | 128 |
| 36 | Inactivation of clathrin heavy chain inhibits synaptic recycling but allows bulk membrane uptake. Journal of Cell Biology, 2008, 182, 1007-1016. | 2.3 | 121 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | A Genome-Wide Search for Synaptic Vesicle Cycle Proteins in Drosophila. Neuron, 2000, 26, 45-50. | 3.8 | 105 |
| 38 | Tweek, an Evolutionarily Conserved Protein, Is Required for Synaptic Vesicle Recycling. Neuron, 2009, 63, 203-215. | 3.8 | 104 |
| 39 | Hsp90 Mediates Membrane Deformation and Exosome Release. Molecular Cell, 2018, 71, 689-702.e9. | 4.5 | 103 |
| 40 | Endophilin-A Deficiency Induces the Foxo3a-Fbxo32 Network in the Brain and Causes Dysregulation of Autophagy and the Ubiquitin-Proteasome System. Cell Reports, 2016, 17, 1071-1086. | 2.9 | 100 |
| 41 | FM 1-43 Labeling of Synaptic Vesicle Pools at the Drosophila Neuromuscular Junction. Methods in Molecular Biology, 2008, 440, 349-369. | 0.4 | 100 |
| 42 | Mitochondrial uncouplers inhibit clathrin-mediated endocytosis largely through cytoplasmic acidification. Nature Communications, 2016, 7, 11710. | 5.8 | 98 |
| 43 | Huntingtin-interacting protein 14, a palmitoyl transferase required for exocytosis and targeting of CSP to synaptic vesicles. Journal of Cell Biology, 2007, 179, 1481-1496. | 2.3 | 97 |
| 44 | TBC1D24 genotypeâ€“phenotype correlation. Neurology, 2016, 87, 77-85. | 1.5 | 97 |
| 45 | Activity-Independent Prespecification of Synaptic Partners in the Visual Map of Drosophila. Current Biology, 2006, 16, 1835-1843. | 1.8 | 96 |
| 46 | ELP3 Controls Active Zone Morphology by Acetylating the ELKS Family Member Bruchpilot. Neuron, 2011, 72, 776-788. | 3.8 | 94 |
| 47 | Recombineering-mediated tagging of Drosophila genomic constructs for in vivo localization and acute protein inactivation. Nucleic Acids Research, 2008, 36, e114-e114. | 6.5 | 91 |
| 48 | Synaptic PI(3,4,5)P3 Is Required for Syntaxin1A Clustering and Neurotransmitter Release. Neuron, 2013, 77, 1097-1108. | 3.8 | 91 |
| 49 | Mapping Drosophila mutations with molecularly defined P element insertions. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10860-10865. | 3.3 | 89 |
| 50 | Torsins Are Essential Regulators of Cellular Lipid Metabolism. Developmental Cell, 2016, 38, 235-247. | 3.1 | 88 |
| 51 | Endophilin Promotes a Late Step in Endocytosis at Glial Invaginations inDrosophilaPhotoreceptor Terminals. Journal of Neuroscience, 2003, 23, 10732-10744. | 1.7 | 86 |
| 52 | The Yeast Complex I Equivalent NADH Dehydrogenase Rescues pink1 Mutants. PLoS Genetics, 2012, 8, e1002456. | 1.5 | 86 |
| 53 | Synaptic vesicle trafficking and Parkinson's disease. Developmental Neurobiology, 2012, 72, 134-144. | 1.5 | 83 |
| 54 | Mutations in the Intellectual Disability Gene Ube2a Cause Neuronal Dysfunction and Impair Parkin-Dependent Mitophagy. Molecular Cell, 2013, 50, 831-843. | 4.5 | 80 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Reduced synaptic vesicle protein degradation at lysosomes curbs TBC1D24/sky-induced neurodegeneration. Journal of Cell Biology, 2014, 207, 453-462. | 2.3 | 78 |
| 56 | ER Lipid Defects in Neuropeptidergic Neurons Impair Sleep Patterns in Parkinsonâ€™s Disease. Neuron, 2018, 98, 1155-1169.e6. | 3.8 | 77 |
| 57 | Parkinson's disease: convergence on synaptic homeostasis. EMBO Journal, 2018, 37, . | 3.5 | 76 |
| 58 | Conditional depletion of intellectual disability and Parkinsonism candidate gene ATP6AP2 in fly and mouse induces cognitive impairment and neurodegeneration. Human Molecular Genetics, 2015, 24, 6736-6755. | 1.4 | 64 |
| 59 | Dual loss of succinate dehydrogenase (SDH) and complex I activity is necessary to recapitulate the metabolic phenotype of SDH mutant tumors. Metabolic Engineering, 2017, 43, 187-197. | 3.6 | 64 |
| 60 | Aconitase Causes Iron Toxicity in Drosophila pink1 Mutants. PLoS Genetics, 2013, 9, e1003478. | 1.5 | 63 |
| 61 | straightjacket is required for the synaptic stabilization of cacophony, a voltage-gated calcium channel Î±1 subunit. Journal of Cell Biology, 2008, 181, 157-170. | 2.3 | 61 |
| 62 | Presynaptic protein homeostasis and neuronal function. Current Opinion in Genetics and Development, 2017, 44, 38-46. | 1.5 | 56 |
| 63 | In vivo single-molecule imaging of syntaxin1A reveals polyphosphoinositide- and activity-dependent trapping in presynaptic nanoclusters. Nature Communications, 2016, 7, 13660. | 5.8 | 55 |
| 64 | Skywalker-TBC1D24 has a lipid-binding pocket mutated in epilepsy and required for synaptic function. Nature Structural and Molecular Biology, 2016, 23, 965-973. | 3.6 | 55 |
| 65 | Conditional Mutagenesis in Drosophila. Science, 2009, 324, 54-54. | 6.0 | 51 |
| 66 | Alternative oxidase rescues mitochondria-mediated dopaminergic cell loss in Drosophila. Human Molecular Genetics, 2012, 21, 2698-2712. | 1.4 | 51 |
| 67 | Cardiolipin promotes electron transport between ubiquinone and complex I to rescue PINK1 deficiency. Journal of Cell Biology, 2017, 216, 695-708. | 2.3 | 48 |
| 68 | Trapping of Syntaxin1a in Presynaptic Nanoclusters by a Clinically Relevant General Anesthetic. Cell Reports, 2018, 22, 427-440. | 2.9 | 45 |
| 69 | TBC1D24-TLDc-related epilepsy exercise-induced dystonia: rescue by antioxidants in a disease model. Brain, 2019, 142, 2319-2335. | 3.7 | 44 |
| 70 | Lowering Synaptogyrin-3 expression rescues Tau-induced memory defects and synaptic loss in the presence of microglial activation. Neuron, 2021, 109, 767-777.e5. | 3.8 | 41 |
| 71 | Human Intellectual Disability Genes Form Conserved Functional Modules in Drosophila. PLoS Genetics, 2013, 9, e1003911. | 1.5 | 39 |
| 72 | Near-Infrared 808 nm Light Boosts Complex IV-Dependent Respiration and Rescues a Parkinson-Related pink1 Model. PLoS ONE, 2013, 8, e78562. | 1.1 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | CEP89 is required for mitochondrial metabolism and neuronal function in man and fly. Human Molecular Genetics, 2013, 22, 3138-3151. | 1.4 | 38 |
| 74 | HDAC6 Is a Bruchpilot Deacetylase that Facilitates Neurotransmitter Release. Cell Reports, 2014, 8, 94-102. | 2.9 | 38 |
| 75 | Dynamin photoinactivation blocks Clathrin and Î±-adaptin recruitment and induces bulk membrane retrieval. Journal of Cell Biology, 2014, 204, 1141-1156. | 2.3 | 38 |
| 76 | Impaired Autonomic Regulation of Resistance Arteries in Mice With Low Vascular Endothelial Growth Factor or Upon Vascular Endothelial Growth Factor Trap Delivery. Circulation, 2010, 122, 273-281. | 1.6 | 37 |
| 77 | Chronological requirements of TDP-43 function in synaptic organization and locomotive control. Neurobiology of Disease, 2014, 71, 95-109. | 2.1 | 36 |
| 78 | Neurons Generated from APP/APLP1/APLP2 Triple Knockout Embryonic Stem Cells Behave Normally in Vitro and in Vivo: Lack of Evidence for a Cell Autonomous Role of the Amyloid Precursor Protein in Neuronal Differentiation. Stem Cells, 2010, 28, 399-406. | 1.4 | 35 |
| 79 | Maturation of neuronal AD-tau pathology involves site-specific phosphorylation of cytoplasmic and synaptic tau preceding conformational change and fibril formation. Acta Neuropathologica, 2021, 141, 173-192. | 3.9 | 35 |
| 80 | Drosophila rugoseIs a Functional Homolog of MammalianNeurobeachinand Affects Synaptic Architecture, Brain Morphology, and Associative Learning. Journal of Neuroscience, 2012, 32, 15193-15204. | 1.7 | 34 |
| 81 | De novo loss-of-function mutations in WAC cause a recognizable intellectual disability syndrome and learning deficits in Drosophila. European Journal of Human Genetics, 2016, 24, 1145-1153. | 1.4 | 34 |
| 82 | Shawn, theDrosophilaHomolog of SLC25A39/40, Is a Mitochondrial Carrier That Promotes Neuronal Survival. Journal of Neuroscience, 2016, 36, 1914-1929. | 1.7 | 33 |
| 83 | Neurologic Dysfunction and Male Infertility in Drosophila porin Mutants. Journal of Biological Chemistry, 2010, 285, 11143-11153. | 1.6 | 32 |
| 84 | EndoA/Endophilin-A creates docking stations for autophagic proteins at synapses. Autophagy, 2017, 13, 971-972. | 4.3 | 32 |
| 85 | Flies with Parkinson's disease. Experimental Neurology, 2015, 274, 42-51. | 2.0 | 29 |
| 86 | Need for speed: Super-resolving the dynamic nanoclustering of syntaxin-1 at exocytic fusion sites. Neuropharmacology, 2020, 169, 107554. | 2.0 | 29 |
| 87 | The Alzheimer susceptibility gene BIN1 induces isoform-dependent neurotoxicity through early endosome defects. Acta Neuropathologica Communications, 2022, 10, 4. | 2.4 | 29 |
| 88 | New Approaches for Studying Synaptic Development, Function, and Plasticity UsingDrosophilaas a Model System. Journal of Neuroscience, 2013, 33, 17560-17568. | 1.7 | 28 |
| 89 | Therapeutic strategies in Parkinson's disease: what we have learned from animal models. Annals of the New York Academy of Sciences, 2015, 1338, 16-37. | 1.8 | 27 |
| 90 | Sub-diffraction imaging on standard microscopes through Photobleaching Microscopy with non-linear Processing. Journal of Cell Science, 2012, 125, 2257-66. | 1.2 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Torsin and NEP1R1â€CTDNEP1 phosphatase affect interphase nuclear pore complex insertion by lipidâ€dependent and lipidâ€independent mechanisms. EMBO Journal, 2021, 40, e106914. | 3.5 | 24 |
| 92 | Ubiquitin Ligase HUWE1 Regulates Axon Branching through the Wnt/Î²-Catenin Pathway in a Drosophila Model for Intellectual Disability. PLoS ONE, 2013, 8, e81791. | 1.1 | 23 |
| 93 | Excess Lipin enzyme activity contributes to TOR1A recessive disease and DYT-TOR1A dystonia. Brain, 2020, 143, 1746-1765. | 3.7 | 22 |
| 94 | Development of an enzyme-linked immunosorbent assay for detection of cellular and in vivo LRRK2 S935 phosphorylation. Journal of Pharmaceutical and Biomedical Analysis, 2013, 76, 49-58. | 1.4 | 21 |
| 95 | Metabolic Channeling of Carbamoyl Phosphate, a Thermolabile Intermediate. Journal of Biological Chemistry, 2002, 277, 18517-18522. | 1.6 | 20 |
| 96 | Fast and EfficientDrosophila melanogasterGene Knock-Ins Using MiMIC Transposons. G3: Genes, Genomes, Genetics, 2014, 4, 2381-2387. | 0.8 | 17 |
| 97 | Meaningless minis? Mechanisms of neurotransmitter-receptor clustering. Trends in Neurosciences, 2002, 25, 383-385. | 4.2 | 15 |
| 98 | Synaptic vesicle retrieval: still time for a kiss. Nature Cell Biology, 2002, 4, E245-E248. | 4.6 | 15 |
| 99 | Neurons eat glutamate to stay alive. Journal of Cell Biology, 2017, 216, 863-865. | 2.3 | 15 |
| 100 | Presynaptic Autophagy and the Connection With Neurotransmission. Frontiers in Cell and Developmental Biology, 2021, 9, 790721. | 1.8 | 13 |
| 101 | PIWIL1 protein power targets tau therapy. Nature Neuroscience, 2014, 17, 334-335. | 7.1 | 11 |
| 102 | A structure of substrate-bound Synaptojanin1 provides new insights in its mechanism and the effect of disease mutations. ELife, 2020, 9, . | 2.8 | 11 |
| 103 | Do we still need animals? Surveying the role of animalâ€free models in Alzheimerâ€™s and Parkinsonâ€™s disease research. EMBO Journal, 2022, 41, e110002. | 3.5 | 11 |
| 104 | Stimulation of electron transport as potential novel therapy in Parkinson's disease with mitochondrial dysfunction. Biochemical Society Transactions, 2015, 43, 275-279. | 1.6 | 10 |
| 105 | <em>In Vivo</em> Single-Molecule Tracking at the Drosophila Presynaptic Motor Nerve Terminal. Journal of Visualized Experiments, 2018, , . | 0.2 | 10 |
| 106 | MAPRE2 mutations result in altered human cranial neural crest migration, underlying craniofacial malformations in CSC-KT syndrome. Scientific Reports, 2021, 11, 4976. | 1.6 | 10 |
| 107 | Endophilin-B regulates autophagy during synapse development and neurodegeneration. Neurobiology of Disease, 2022, 163, 105595. | 2.1 | 10 |
| 108 | Î±-Synuclein and Tau: Mitochondrial Kill Switches. Neuron, 2018, 97, 3-4. | 3.8 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Imaging mitophagy in the fruit fly. Autophagy, 2018, 14, 1656-1657. | 4.3 | 9 |
| 110 | Molecule-to-Circuit Disease Mechanisms of a Synaptic SNAREopathy. Neuron, 2021, 109, 1-3. | 3.8 | 9 |
| 111 | Mitochondria Re-set Epilepsy. Neuron, 2019, 102, 907-910. | 3.8 | 8 |
| 112 | Synaptic proteostasis in Parkinson's disease. Current Opinion in Neurobiology, 2022, 72, 72-79. | 2.0 | 7 |
| 113 | NEUROSCIENCE: The Meaning of a Mini. Science, 2001, 293, 443-444. | 6.0 | 6 |
| 114 | FlAsH-FALI Inactivation of a Protein at the Third-Instar Neuromuscular Junction: Figure 1.. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot5597. | 0.2 | 5 |
| 115 | Phosphoinositides at the Neuromuscular Junction of Drosophila melanogaster: A Genetic Approach. Methods in Cell Biology, 2012, 108, 227-247. | 0.5 | 5 |
| 116 | Reprogramming neurodegeneration in the big data era. Current Opinion in Neurobiology, 2018, 48, 167-173. | 2.0 | 5 |
| 117 | Ultrafast Synaptic Endocytosis Cycles to the Center Stage. Developmental Cell, 2014, 28, 5-6. | 3.1 | 4 |
| 118 | Synaptic tau and synaptogyrinâ€ are promising targets to tackle tauopathies. Alzheimer's and Dementia, 2021, 17, e054187. | 0.4 | 3 |
| 119 | Construction and Expression of Tetracysteine-Tagged Proteins for FlAsH-FALI. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot5596. | 0.2 | 2 |
| 120 | Chaperoning the synapseâ€"NMNAT protects Bruchpilot from crashing. EMBO Reports, 2013, 14, 5-6. | 2.0 | 2 |
| 121 | Assaying Mutants of Clathrin-Mediated Endocytosis in the Fly Eye. Methods in Molecular Biology, 2018, 1847, 109-119. | 0.4 | 2 |
| 122 | p13 protects against Parkinson's disease. EMBO Reports, 2018, 19, . | 2.0 | 1 |
| 123 | Purification of Soluble Recombinant Human Tau Protein from Bacteria Using Double-tag Affinity Purification. Bio-protocol, 2018, 8, e3043. | 0.2 | 1 |
| 124 | Synaptic Vesicle Endocytosis. , 2008, , 207-238. | | 0 |
| 125 | Studying Synaptic Transmission at the Drosophila Neuromuscular Junction Using Advanced FM 1-43 Technology. Neuromethods, 2012, , 127-141. | 0.2 | 0 |
| 126 | The pathogenic mutation in tau defines the route of tau accumulation at presynapses.. Alzheimer's and Dementia, 2021, 17 Suppl 3, e053728. | 0.4 | 0 |