

Volker Haucke

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8674479/publications.pdf>

Version: 2024-02-01

130
papers

11,011
citations

29994

54
h-index

33814

99
g-index

137
all docs

137
docs citations

137
times ranked

12826
citing authors

#	ARTICLE	IF	CITATIONS
1	Functional partnership between amphiphysin and dynamin in clathrin-mediated endocytosis. <i>Nature Cell Biology</i> , 1999, 1, 33-39.	4.6	703
2	Composition of isolated synaptic boutons reveals the amounts of vesicle trafficking proteins. <i>Science</i> , 2014, 344, 1023-1028.	6.0	637
3	Protein scaffolds in the coupling of synaptic exocytosis and endocytosis. <i>Nature Reviews Neuroscience</i> , 2011, 12, 127-138.	4.9	497
4	Role of the Clathrin Terminal Domain in Regulating Coated Pit Dynamics Revealed by Small Molecule Inhibition. <i>Cell</i> , 2011, 146, 471-484.	13.5	459
5	Spatiotemporal control of endocytosis by phosphatidylinositol-3,4-bisphosphate. <i>Nature</i> , 2013, 499, 233-237.	13.7	362
6	Generation of Coated Intermediates of Clathrin-Mediated Endocytosis on Protein-Free Liposomes. <i>Cell</i> , 1998, 94, 131-141.	13.5	342
7	ARF6 stimulates clathrin/AP-2 recruitment to synaptic membranes by activating phosphatidylinositol phosphate kinase type I β . <i>Journal of Cell Biology</i> , 2003, 162, 113-124.	2.3	280
8	Crystal structure of nucleotide-free dynamin. <i>Nature</i> , 2011, 477, 556-560.	13.7	277
9	Phosphatidylinositol-(4,5)-Bisphosphate Regulates Sorting Signal Recognition by the Clathrin-Associated Adaptor Complex AP2. <i>Molecular Cell</i> , 2005, 18, 519-531.	4.5	257
10	Phosphatidylinositol 3-phosphates at the interface between cell signalling and membrane traffic. <i>EMBO Journal</i> , 2016, 35, 561-579.	3.5	221
11	Plasmalemmal Phosphatidylinositol-4,5-Bisphosphate Level Regulates the Releasable Vesicle Pool Size in Chromaffin Cells. <i>Journal of Neuroscience</i> , 2005, 25, 2557-2565.	1.7	208
12	BAR Domain Scaffolds in Dynamin-Mediated Membrane Fission. <i>Cell</i> , 2014, 156, 882-892.	13.5	199
13	Surface Functionalization of Silica Nanoparticles Supports Colloidal Stability in Physiological Media and Facilitates Internalization in Cells. <i>Langmuir</i> , 2012, 28, 7598-7613.	1.6	190
14	Clathrin/AP-2 Mediate Synaptic Vesicle Reformation from Endosome-like Vacuoles but Are Not Essential for Membrane Retrieval at Central Synapses. <i>Neuron</i> , 2014, 82, 981-988.	3.8	181
15	Molecular Mechanisms of Presynaptic Membrane Retrieval and Synaptic Vesicle Reformation. <i>Neuron</i> , 2015, 85, 484-496.	3.8	180
16	PI3K Class II β Controls Spatially Restricted Endosomal PtdIns3P and Rab11 Activation to Promote Primary Cilium Function. <i>Developmental Cell</i> , 2014, 28, 647-658.	3.1	177
17	A phosphoinositide conversion mechanism for exit from endosomes. <i>Nature</i> , 2016, 529, 408-412.	13.7	162
18	A phosphatidylinositol (4,5)-bisphosphate binding site within β 2-adaptin regulates clathrin-mediated endocytosis. <i>Journal of Cell Biology</i> , 2002, 158, 209-214.	2.3	154

#	ARTICLE	IF	CITATIONS
19	Stonin 2 Is an AP-2-Dependent Endocytic Sorting Adaptor for Synaptotagmin Internalization and Recycling. <i>Developmental Cell</i> , 2006, 10, 233-244.	3.1	152
20	Phosphoinositide conversion in endocytosis and the endolysosomal system. <i>Journal of Biological Chemistry</i> , 2018, 293, 1526-1535.	1.6	152
21	Synaptic Vesicle Endocytosis Occurs on Multiple Timescales and Is Mediated by Formin-Dependent Actin Assembly. <i>Neuron</i> , 2017, 93, 854-866.e4.	3.8	144
22	Molecular basis for SH3 domain regulation of F-BAR-mediated membrane deformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8213-8218.	3.3	138
23	Phosphoinositides in endocytosis. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2015, 1851, 794-804.	1.2	137
24	Stimulation of phosphatidylinositol kinase type I-mediated phosphatidylinositol (4,5)-bisphosphate synthesis by AP-2-cargo complexes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11934-11939.	3.3	132
25	Phosphoinositide-metabolizing enzymes at the interface between membrane traffic and cell signalling. <i>EMBO Reports</i> , 2007, 8, 241-246.	2.0	131
26	Retrograde transport of TrkB-containing autophagosomes via the adaptor AP-2 mediates neuronal complexity and prevents neurodegeneration. <i>Nature Communications</i> , 2017, 8, 14819.	5.8	130
27	mTORC1 activity repression by late endosomal phosphatidylinositol 3,4-bisphosphate. <i>Science</i> , 2017, 356, 968-972.	6.0	126
28	SNARE motif-mediated sorting of synaptobrevin by the endocytic adaptors clathrin assembly lymphoid myeloid leukemia (CALM) and AP180 at synapses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 13540-13545.	3.3	123
29	Crystal structure of the dynamin tetramer. <i>Nature</i> , 2015, 525, 404-408.	13.7	115
30	Phosphoinositides as membrane organizers. <i>Nature Reviews Molecular Cell Biology</i> , 2022, 23, 797-816.	16.1	114
31	Multi-colour direct STORM with red emitting carbocyanines. <i>Biology of the Cell</i> , 2012, 104, 229-237.	0.7	111
32	Presynaptic Biogenesis Requires Axonal Transport of Lysosome-Related Vesicles. <i>Neuron</i> , 2018, 99, 1216-1232.e7.	3.8	109
33	Lipid-mediated PX-BAR domain recruitment couples local membrane constriction to endocytic vesicle fission. <i>Nature Communications</i> , 2017, 8, 15873.	5.8	101
34	Arf1-GTP-induced Tubule Formation Suggests a Function of Arf Family Proteins in Curvature Acquisition at Sites of Vesicle Budding. <i>Journal of Biological Chemistry</i> , 2008, 283, 27717-27723.	1.6	100
35	Blocking Endocytosis Enhances Short-Term Synaptic Depression under Conditions of Normal Availability of Vesicles. <i>Neuron</i> , 2013, 80, 343-349.	3.8	97
36	Mutations in Disordered Regions Can Cause Disease by Creating Dileucine Motifs. <i>Cell</i> , 2018, 175, 239-253.e17.	13.5	97

#	ARTICLE	IF	CITATIONS
37	Lipids and lipid modifications in the regulation of membrane traffic. <i>Current Opinion in Cell Biology</i> , 2007, 19, 426-435.	2.6	96
38	Membrane remodeling in clathrin-mediated endocytosis. <i>Journal of Cell Science</i> , 2018, 131, .	1.2	96
39	Greasing the synaptic vesicle cycle by membrane lipids. <i>Trends in Cell Biology</i> , 2013, 23, 493-503.	3.6	95
40	Membrane shaping by the Bin/amphiphysin/Rvs (BAR) domain protein superfamily. <i>Cellular and Molecular Life Sciences</i> , 2011, 68, 3983-3993.	2.4	91
41	Neuronal Autophagy Regulates Presynaptic Neurotransmission by Controlling the Axonal Endoplasmic Reticulum. <i>Neuron</i> , 2021, 109, 299-313.e9.	3.8	91
42	Lysosomal Dysfunction Caused by Cellular Accumulation of Silica Nanoparticles. <i>Journal of Biological Chemistry</i> , 2016, 291, 14170-14184.	1.6	89
43	RIM-binding protein 2 regulates release probability by fine-tuning calcium channel localization at murine hippocampal synapses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11615-11620.	3.3	86
44	Disruption of endocytosis through chemical inhibition of clathrin heavy chain function. <i>Nature Chemical Biology</i> , 2019, 15, 641-649.	3.9	86
45	Disruption of adaptor protein 2 (AP2) in cochlear hair cells impairs vesicle reloading of synaptic release sites and hearing. <i>EMBO Journal</i> , 2015, 34, 2686-2702.	3.5	84
46	Compromised fidelity of endocytic synaptic vesicle protein sorting in the absence of stonin 2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E526-35.	3.3	78
47	A Recurrent Missense Variant in AP2M1 Impairs Clathrin-Mediated Endocytosis and Causes Developmental and Epileptic Encephalopathy. <i>American Journal of Human Genetics</i> , 2019, 104, 1060-1072.	2.6	78
48	Vesicular Synaptobrevin/VAMP2 Levels Guarded by AP180 Control Efficient Neurotransmission. <i>Neuron</i> , 2015, 88, 330-344.	3.8	76
49	Modes and mechanisms of synaptic vesicle recycling. <i>Current Opinion in Neurobiology</i> , 2016, 39, 17-23.	2.0	74
50	Regulation of synaptic vesicle recycling by complex formation between intersectin 1 and the clathrin adaptor complex AP2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 4206-4211.	3.3	73
51	Molecular basis of synaptic vesicle cargo recognition by the endocytic sorting adaptor stonin 2. <i>Journal of Cell Biology</i> , 2007, 179, 1497-1510.	2.3	64
52	Vesicle Clustering in a Living Synapse Depends on a Synapsin Region that Mediates Phase Separation. <i>Cell Reports</i> , 2020, 30, 2594-2602.e3.	2.9	64
53	Intersectin 1: a versatile actor in the synaptic vesicle cycle. <i>Biochemical Society Transactions</i> , 2010, 38, 181-186.	1.6	60
54	Structural Insights into Dynamin-Mediated Membrane Fission. <i>Structure</i> , 2012, 20, 1621-1628.	1.6	60

#	ARTICLE	IF	CITATIONS
55	Molecularly Distinct Clathrin-Coated Pits Differentially Impact EGFR Fate and Signaling. <i>Cell Reports</i> , 2019, 27, 3049-3061.e6.	2.9	58
56	Human stoned B interacts with AP ϵ 2 and synaptotagmin and facilitates clathrin ϵ -coated vesicle uncoating. <i>EMBO Reports</i> , 2001, 2, 634-640.	2.0	57
57	At the Crossroads of Chemistry and Cell Biology: Inhibiting Membrane Traffic by Small Molecules. <i>Traffic</i> , 2012, 13, 495-504.	1.3	56
58	PI4K2 β /AP-1-Based TGN-Endosomal Sorting Regulates Wnt Signaling. <i>Current Biology</i> , 2013, 23, 2185-2190.	1.8	56
59	Overlapping functions of stonin 2 and SV2 in sorting of the calcium sensor synaptotagmin 1 to synaptic vesicles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 7297-7302.	3.3	54
60	Fast neurotransmitter release regulated by the endocytic scaffold intersectin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8266-8271.	3.3	51
61	Presynaptic endocytic factors in autophagy and neurodegeneration. <i>Current Opinion in Neurobiology</i> , 2018, 48, 153-159.	2.0	48
62	Diffusional spread and confinement of newly exocytosed synaptic vesicle proteins. <i>Nature Communications</i> , 2015, 6, 8392.	5.8	47
63	Intersectin associates with synapsin and regulates its nanoscale localization and function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12057-12062.	3.3	47
64	Mutations in PIK3C2A cause syndromic short stature, skeletal abnormalities, and cataracts associated with ciliary dysfunction. <i>PLoS Genetics</i> , 2019, 15, e1008088.	1.5	45
65	Asymmetric distribution of TLR3 leads to a polarized immune response in human intestinal epithelial cells. <i>Nature Microbiology</i> , 2020, 5, 181-191.	5.9	45
66	SnapShot: Endocytic Trafficking. <i>Cell</i> , 2009, 137, 382.e1-382.e3.	13.5	44
67	Coupling of exocytosis and endocytosis at the presynaptic active zone. <i>Neuroscience Research</i> , 2018, 127, 45-52.	1.0	43
68	A Presynaptic Perspective on Transport and Assembly Mechanisms for Synapse Formation. <i>Neuron</i> , 2021, 109, 27-41.	3.8	43
69	Autoregulation of Class II Alpha PI3K Activity by Its Lipid-Binding PX-C2 Domain Module. <i>Molecular Cell</i> , 2018, 71, 343-351.e4.	4.5	41
70	EHD2-mediated restriction of caveolar dynamics regulates cellular fatty acid uptake. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 7471-7481.	3.3	41
71	Vesicle uncoating regulated by ϵ 3 domain ϵ -mediated complex formation between endophilin and intersectin at synapses. <i>EMBO Reports</i> , 2015, 16, 232-239.	2.0	40
72	Intersectin 1 is a component of the Reelin pathway to regulate neuronal migration and synaptic plasticity in the hippocampus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5533-5538.	3.3	40

#	ARTICLE	IF	CITATIONS
73	Stoninsâ€”Specialized Adaptors for Synaptic Vesicle Recycling and Beyond?. Traffic, 2010, 11, 8-15.	1.3	39
74	Phosphatidylinositol 4,5-bisphosphate optical uncaging potentiates exocytosis. ELife, 2017, 6, .	2.8	39
75	Phosphoinositide switches in endocytosis and in the endolysosomal system. Current Opinion in Cell Biology, 2019, 59, 50-57.	2.6	38
76	PI(3,4)P2-mediated cytokinetic abscission prevents early senescence and cataract formation. Science, 2021, 374, eabk0410.	6.0	37
77	Turning CALM into excitement: AP180 and CALM in endocytosis and disease. Biology of the Cell, 2012, 104, 588-602.	0.7	36
78	Endocytosis in the adaptation to cellular stress. Cell Stress, 2020, 4, 230-247.	1.4	36
79	A Presynaptic Role for the Cytomatrix Protein GIT in Synaptic Vesicle Recycling. Cell Reports, 2014, 7, 1417-1425.	2.9	35
80	Protein kinase N controls a lysosomal lipid switch to facilitate nutrient signalling via mTORC1. Nature Cell Biology, 2019, 21, 1093-1101.	4.6	35
81	Quantitative fluorescence imaging determines the absolute number of locked nucleic acid oligonucleotides needed for suppression of target gene expression. Nucleic Acids Research, 2019, 47, 953-969.	6.5	35
82	Phosphoinositides in the control of lysosome function and homeostasis. Biochemical Society Transactions, 2019, 47, 1173-1185.	1.6	33
83	Spermidine protects from age-related synaptic alterations at hippocampal mossy fiber-CA3 synapses. Scientific Reports, 2019, 9, 19616.	1.6	33
84	Endocytic regulation of cellular ion homeostasis controls lysosome biogenesis. Nature Cell Biology, 2020, 22, 815-827.	4.6	33
85	A Coincidence Detection Mechanism Controls PX-BAR Domain-Mediated Endocytic Membrane Remodeling via an Allosteric Structural Switch. Developmental Cell, 2017, 43, 522-529.e4.	3.1	32
86	The INPP4B Tumor Suppressor Modulates EGFR Trafficking and Promotes Triple-Negative Breast Cancer. Cancer Discovery, 2020, 10, 1226-1239.	7.7	32
87	Multicolor Caged dSTORM Resolves the Ultrastructure of Synaptic Vesicles in the Brain. Angewandte Chemie - International Edition, 2015, 54, 13230-13235.	7.2	31
88	A putative role for intramolecular regulatory mechanisms in the adaptor function of amphiphysin in endocytosis. Neuropharmacology, 2003, 45, 787-796.	2.0	30
89	Molecular Basis for Association of PIPKÎ³-p90 with Clathrin Adaptor AP-2. Journal of Biological Chemistry, 2010, 285, 2734-2749.	1.6	27
90	Inositol triphosphate-triggered calcium release blocks lipid exchange at endoplasmic reticulum-Golgi contact sites. Nature Communications, 2021, 12, 2673.	5.8	27

#	ARTICLE	IF	CITATIONS
91	Endophilin-A coordinates priming and fusion of neurosecretory vesicles via intersectin. <i>Nature Communications</i> , 2020, 11, 1266.	5.8	26
92	The axonal endolysosomal and autophagic systems. <i>Journal of Neurochemistry</i> , 2021, 158, 589-602.	2.1	24
93	Intersectin-Mediated Clearance of SNARE Complexes Is Required for Fast Neurotransmission. <i>Cell Reports</i> , 2020, 30, 409-420.e6.	2.9	22
94	Cargo Takes Control of Endocytosis. <i>Cell</i> , 2006, 127, 35-37.	13.5	19
95	Rab35-regulated lipid turnover by myotubularins represses mTORC1 activity and controls myelin growth. <i>Nature Communications</i> , 2020, 11, 2835.	5.8	19
96	Mechanism of synaptic protein turnover and its regulation by neuronal activity. <i>Current Opinion in Neurobiology</i> , 2021, 69, 76-83.	2.0	18
97	Neurotransmission: Spontaneous and Evoked Release Filing for Divorce. <i>Current Biology</i> , 2014, 24, R192-R194.	1.8	17
98	The cell adhesion protein CAR is a negative regulator of synaptic transmission. <i>Scientific Reports</i> , 2019, 9, 6768.	1.6	17
99	Nanoscale coupling of endocytic pit growth and stability. <i>Science Advances</i> , 2019, 5, eaax5775.	4.7	17
100	Dysregulation of myelin synthesis and actomyosin function underlies aberrant myelin in CMT4B1 neuropathy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	17
101	On the endocytosis rollercoaster. <i>Nature</i> , 2015, 517, 446-447.	13.7	15
102	Vps34 derived phosphatidylinositol 3-monophosphate modulates megakaryocyte maturation and proplatelet production through late endosomes/lysosomes. <i>Journal of Thrombosis and Haemostasis</i> , 2020, 18, 1756-1772.	1.9	15
103	Phosphatidylinositol 3,4-bisphosphate synthesis and turnover are spatially segregated in the endocytic pathway. <i>Journal of Biological Chemistry</i> , 2020, 295, 1091-1104.	1.6	15
104	Structural basis of phosphatidylinositol 3-kinase C2 β function. <i>Nature Structural and Molecular Biology</i> , 2022, 29, 218-228.	3.6	14
105	Phosphatidylinositol 3,4-bisphosphate synthesis and turnover are spatially segregated in the endocytic pathway. <i>Journal of Biological Chemistry</i> , 2020, 295, 1091-1104.	1.6	12
106	The molecular mechanisms mediating class II PI 3-kinase function in cell physiology. <i>FEBS Journal</i> , 2021, 288, 7025-7042.	2.2	12
107	Clathrin-independent endocytic retrieval of SV proteins mediated by the clathrin adaptor AP-2 at mammalian central synapses. <i>ELife</i> , 2022, 11, .	2.8	12
108	Sulfonated red and far-red rhodamines to visualize SNAP- and Halo-tagged cell surface proteins. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 5967-5980.	1.5	12

#	ARTICLE	IF	CITATIONS
109	Selective endocytosis of Ca ²⁺ -permeable AMPARs by the Alzheimer's disease risk factor CALM bidirectionally controls synaptic plasticity. <i>Science Advances</i> , 2022, 8, .	4.7	12
110	Local synthesis of the phosphatidylinositol-3,4-bisphosphate lipid drives focal adhesion turnover. <i>Developmental Cell</i> , 2022, 57, 1694-1711.e7.	3.1	11
111	A Novel Subtype of AP-1-binding Motif within the Palmitoylated trans-Golgi Network/Endosomal Accessory Protein Gadkin/β-BAR. <i>Journal of Biological Chemistry</i> , 2010, 285, 4074-4086.	1.6	10
112	Defective lipid signalling caused by mutations in PIK3C2B underlies focal epilepsy. <i>Brain</i> , 2022, 145, 2313-2331.	3.7	10
113	Phosphoinositide Conversion Inactivates ERAS and Drives Metastases in Breast Cancer. <i>Advanced Science</i> , 2022, 9, e2103249.	5.6	8
114	Liquid-like protein assemblies initiate endocytosis. <i>Nature Cell Biology</i> , 2021, 23, 301-302.	4.6	7
115	Inositol triphosphate-triggered calcium release from the endoplasmic reticulum induces lysosome biogenesis via TFEB/TFE3. <i>Journal of Biological Chemistry</i> , 2022, 298, 101740.	1.6	7
116	SynActJ: Easy-to-Use Automated Analysis of Synaptic Activity. <i>Frontiers in Computer Science</i> , 2021, 3, .	1.7	6
117	Neuronal autophagy controls the axonal endoplasmic reticulum to regulate neurotransmission in healthy neurons. <i>Autophagy</i> , 2021, 17, 1049-1051.	4.3	5
118	Endosomal phosphatidylinositol 3-phosphate controls synaptic vesicle cycling and neurotransmission. <i>EMBO Journal</i> , 2022, 41, e109352.	3.5	5
119	Exon Inclusion Modulates Conformational Plasticity and Autoinhibition of the Intersectin 1 SH3A Domain. <i>Structure</i> , 2019, 27, 977-987.e5.	1.6	4
120	Mechanical signals regulate TORC2 activity. <i>Nature Cell Biology</i> , 2018, 20, 994-995.	4.6	3
121	A Novel Twist in Membrane deformation. <i>Developmental Cell</i> , 2014, 31, 3-4.	3.1	2
122	Autophagosome Formation by Endophilin Keeps Synapses in Shape. <i>Neuron</i> , 2016, 92, 675-677.	3.8	2
123	A lipid off-switch for mTORC1. <i>Molecular and Cellular Oncology</i> , 2017, 4, e1356899.	0.3	2
124	A Golgi-associated lipid kinase controls peripheral nerve myelination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 30873-30875.	3.3	2
125	Ramping up the autophagy-lysosome system to cope with osmotic stress. <i>Autophagy</i> , 2020, 16, 1921-1922.	4.3	1
126	The tortoise and the hare revisited. <i>ELife</i> , 2013, 2, e01233.	2.8	1

#	ARTICLE	IF	CITATIONS
127	Neuronal functions of clathrin-associated endocytic sorting adaptors“ from molecules to disease. Neuroforum, 2020, 26, 209-217.	0.2	1
128	Inositol Triphosphate Signaling Triggers Lysosome Biogenesis Via Calcium Release from Endoplasmic Reticulum Stores. Contact (Thousand Oaks (Ventura County, Calif)), 2022, 5, 251525642210970.	0.4	1
129	Hopping Pits Catch Fusing Granules. Developmental Cell, 2015, 35, 10-11.	3.1	0
130	A mechanochemical mechanism couples exocrine secretion to endocytic membrane retrieval. Developmental Cell, 2021, 56, 1557-1559.	3.1	0