List of Publications by Year in descending order

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		30070	33894
130	11,011	54	99
papers	citations	h-index	g-index
137	137	137	12826
all docs	docs citations	times ranked	citing authors

VOLKER HALLCKE

#	Article	IF	CITATIONS
1	Functional partnership between amphiphysin and dynamin in clathrin-mediated endocytosis. Nature Cell Biology, 1999, 1, 33-39.	10.3	703
2	Composition of isolated synaptic boutons reveals the amounts of vesicle trafficking proteins. Science, 2014, 344, 1023-1028.	12.6	637
3	Protein scaffolds in the coupling of synaptic exocytosis and endocytosis. Nature Reviews Neuroscience, 2011, 12, 127-138.	10.2	497
4	Role of the Clathrin Terminal Domain in Regulating Coated Pit Dynamics Revealed by Small Molecule Inhibition. Cell, 2011, 146, 471-484.	28.9	459
5	Spatiotemporal control of endocytosis by phosphatidylinositol-3,4-bisphosphate. Nature, 2013, 499, 233-237.	27.8	362
6	Generation of Coated Intermediates of Clathrin-Mediated Endocytosis on Protein-Free Liposomes. Cell, 1998, 94, 131-141.	28.9	342
7	ARF6 stimulates clathrin/AP-2 recruitment to synaptic membranes by activating phosphatidylinositol phosphate kinase type ll³. Journal of Cell Biology, 2003, 162, 113-124.	5.2	280
8	Crystal structure of nucleotide-free dynamin. Nature, 2011, 477, 556-560.	27.8	277
9	Phosphatidylinositol-(4,5)-Bisphosphate Regulates Sorting Signal Recognition by the Clathrin-Associated Adaptor Complex AP2. Molecular Cell, 2005, 18, 519-531.	9.7	257
10	Phosphatidylinositol 3â€phosphates—at the interface between cell signalling and membrane traffic. EMBO Journal, 2016, 35, 561-579.	7.8	221
11	Plasmalemmal Phosphatidylinositol-4,5-Bisphosphate Level Regulates the Releasable Vesicle Pool Size in Chromaffin Cells. Journal of Neuroscience, 2005, 25, 2557-2565.	3.6	208
12	BAR Domain Scaffolds in Dynamin-Mediated Membrane Fission. Cell, 2014, 156, 882-892.	28.9	199
13	Surface Functionalization of Silica Nanoparticles Supports Colloidal Stability in Physiological Media and Facilitates Internalization in Cells. Langmuir, 2012, 28, 7598-7613.	3.5	190
14	Clathrin/AP-2 Mediate Synaptic Vesicle Reformation from Endosome-like Vacuoles but Are Not Essential for Membrane Retrieval at Central Synapses. Neuron, 2014, 82, 981-988.	8.1	181
15	Molecular Mechanisms of Presynaptic Membrane Retrieval and Synaptic Vesicle Reformation. Neuron, 2015, 85, 484-496.	8.1	180
16	PI3K Class II Î \pm Controls Spatially Restricted Endosomal PtdIns3P and Rab11 Activation to Promote Primary Cilium Function. Developmental Cell, 2014, 28, 647-658.	7.0	177
17	A phosphoinositide conversion mechanism for exit from endosomes. Nature, 2016, 529, 408-412.	27.8	162
18	A phosphatidylinositol (4,5)-bisphosphate binding site within μ2-adaptin regulates clathrin-mediated endocytosis. Journal of Cell Biology, 2002, 158, 209-214.	5.2	154

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19	Stonin 2 Is an AP-2-Dependent Endocytic Sorting Adaptor for Synaptotagmin Internalization and Recycling. Developmental Cell, 2006, 10, 233-244.	7.0	152
20	Phosphoinositide conversion in endocytosis and the endolysosomal system. Journal of Biological Chemistry, 2018, 293, 1526-1535.	3.4	152
21	Synaptic Vesicle Endocytosis Occurs on Multiple Timescales and Is Mediated by Formin-Dependent Actin Assembly. Neuron, 2017, 93, 854-866.e4.	8.1	144
22	Molecular basis for SH3 domain regulation of F-BAR–mediated membrane deformation. Proceedings of the United States of America, 2010, 107, 8213-8218.	7.1	138
23	Phosphoinositides in endocytosis. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2015, 1851, 794-804.	2.4	137
24	Stimulation of phosphatidylinositol kinase type I-mediated phosphatidylinositol (4,5)-bisphosphate synthesis by AP-2Â-cargo complexes. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11934-11939.	7.1	132
25	Phosphoinositideâ€metabolizing enzymes at the interface between membrane traffic and cell signalling. EMBO Reports, 2007, 8, 241-246.	4.5	131
26	Retrograde transport of TrkB-containing autophagosomes via the adaptor AP-2 mediates neuronal complexity and prevents neurodegeneration. Nature Communications, 2017, 8, 14819.	12.8	130
27	mTORC1 activity repression by late endosomal phosphatidylinositol 3,4-bisphosphate. Science, 2017, 356, 968-972.	12.6	126
28	SNARE motif-mediated sorting of synaptobrevin by the endocytic adaptors clathrin assembly lymphoid myeloid leukemia (CALM) and AP180 at synapses. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13540-13545.	7.1	123
29	Crystal structure of the dynamin tetramer. Nature, 2015, 525, 404-408.	27.8	115
30	Phosphoinositides as membrane organizers. Nature Reviews Molecular Cell Biology, 2022, 23, 797-816.	37.0	114
31	Multiâ€colour <i>direct</i> STORM with red emitting carbocyanines. Biology of the Cell, 2012, 104, 229-237.	2.0	111
32	Presynaptic Biogenesis Requires Axonal Transport of Lysosome-Related Vesicles. Neuron, 2018, 99, 1216-1232.e7.	8.1	109
33	Lipid-mediated PX-BAR domain recruitment couples local membrane constriction to endocytic vesicle fission. Nature Communications, 2017, 8, 15873.	12.8	101
34	Arf1-GTP-induced Tubule Formation Suggests a Function of Arf Family Proteins in Curvature Acquisition at Sites of Vesicle Budding. Journal of Biological Chemistry, 2008, 283, 27717-27723.	3.4	100
35	Blocking Endocytosis Enhances Short-Term Synaptic Depression under Conditions of Normal Availability of Vesicles. Neuron, 2013, 80, 343-349.	8.1	97
36	Mutations in Disordered Regions Can Cause Disease by Creating Dileucine Motifs. Cell, 2018, 175, 239-253.e17.	28.9	97

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37	Lipids and lipid modifications in the regulation of membrane traffic. Current Opinion in Cell Biology, 2007, 19, 426-435.	5.4	96
38	Membrane remodeling in clathrin-mediated endocytosis. Journal of Cell Science, 2018, 131, .	2.0	96
39	Greasing the synaptic vesicle cycle by membrane lipids. Trends in Cell Biology, 2013, 23, 493-503.	7.9	95
40	Membrane shaping by the Bin/amphiphysin/Rvs (BAR) domain protein superfamily. Cellular and Molecular Life Sciences, 2011, 68, 3983-3993.	5.4	91
41	Neuronal Autophagy Regulates Presynaptic Neurotransmission by Controlling the Axonal Endoplasmic Reticulum. Neuron, 2021, 109, 299-313.e9.	8.1	91
42	Lysosomal Dysfunction Caused by Cellular Accumulation of Silica Nanoparticles. Journal of Biological Chemistry, 2016, 291, 14170-14184.	3.4	89
43	RIM-binding protein 2 regulates release probability by fine-tuning calcium channel localization at murine hippocampal synapses. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11615-11620.	7.1	86
44	Disruption of endocytosis through chemical inhibition of clathrin heavy chain function. Nature Chemical Biology, 2019, 15, 641-649.	8.0	86
45	Disruption of adaptor protein 2μ (<scp>AP</scp> â€2μ) in cochlear hair cells impairs vesicle reloading of synaptic release sites and hearing. EMBO Journal, 2015, 34, 2686-2702.	7.8	84
46	Compromised fidelity of endocytic synaptic vesicle protein sorting in the absence of stonin 2. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E526-35.	7.1	78
47	A Recurrent Missense Variant in AP2M1 Impairs Clathrin-Mediated Endocytosis and Causes Developmental and Epileptic Encephalopathy. American Journal of Human Genetics, 2019, 104, 1060-1072.	6.2	78
48	Vesicular Synaptobrevin/VAMP2 Levels Guarded by AP180 Control Efficient Neurotransmission. Neuron, 2015, 88, 330-344.	8.1	76
49	Modes and mechanisms of synaptic vesicle recycling. Current Opinion in Neurobiology, 2016, 39, 17-23.	4.2	74
50	Regulation of synaptic vesicle recycling by complex formation between intersectin 1 and the clathrin adaptor complex AP2. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4206-4211.	7.1	73
51	Molecular basis of synaptic vesicle cargo recognition by the endocytic sorting adaptor stonin 2. Journal of Cell Biology, 2007, 179, 1497-1510.	5.2	64
52	Vesicle Clustering in a Living Synapse Depends on a Synapsin Region that Mediates Phase Separation. Cell Reports, 2020, 30, 2594-2602.e3.	6.4	64
53	Intersectin 1: a versatile actor in the synaptic vesicle cycle. Biochemical Society Transactions, 2010, 38, 181-186.	3.4	60
54	Structural Insights into Dynamin-Mediated Membrane Fission. Structure, 2012, 20, 1621-1628.	3.3	60

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55	Molecularly Distinct Clathrin-Coated Pits Differentially Impact EGFR Fate and Signaling. Cell Reports, 2019, 27, 3049-3061.e6.	6.4	58
56	Human stoned B interacts with APâ€⊋ and synaptotagmin and facilitates clathrinâ€coated vesicle uncoating. EMBO Reports, 2001, 2, 634-640.	4.5	57
57	At the Crossroads of Chemistry and Cell Biology: Inhibiting Membrane Traffic by Small Molecules. Traffic, 2012, 13, 495-504.	2.7	56
58	PI4K2β/AP-1-Based TGN-Endosomal Sorting Regulates Wnt Signaling. Current Biology, 2013, 23, 2185-2190.	3.9	56
59	Overlapping functions of stonin 2 and SV2 in sorting of the calcium sensor synaptotagmin 1 to synaptic vesicles. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7297-7302.	7.1	54
60	Fast neurotransmitter release regulated by the endocytic scaffold intersectin. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8266-8271.	7.1	51
61	Presynaptic endocytic factors in autophagy and neurodegeneration. Current Opinion in Neurobiology, 2018, 48, 153-159.	4.2	48
62	Diffusional spread and confinement of newly exocytosed synaptic vesicle proteins. Nature Communications, 2015, 6, 8392.	12.8	47
63	Intersectin associates with synapsin and regulates its nanoscale localization and function. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12057-12062.	7.1	47
64	Mutations in PIK3C2A cause syndromic short stature, skeletal abnormalities, and cataracts associated with ciliary dysfunction. PLoS Genetics, 2019, 15, e1008088.	3.5	45
65	Asymmetric distribution of TLR3 leads to a polarized immune response in human intestinal epithelial cells. Nature Microbiology, 2020, 5, 181-191.	13.3	45
66	SnapShot: Endocytic Trafficking. Cell, 2009, 137, 382.e1-382.e3.	28.9	44
67	Coupling of exocytosis and endocytosis at the presynaptic active zone. Neuroscience Research, 2018, 127, 45-52.	1.9	43
68	A Presynaptic Perspective on Transport and Assembly Mechanisms for Synapse Formation. Neuron, 2021, 109, 27-41.	8.1	43
69	Autoregulation of Class II Alpha PI3K Activity by Its Lipid-Binding PX-C2 Domain Module. Molecular Cell, 2018, 71, 343-351.e4.	9.7	41
70	EHD2-mediated restriction of caveolar dynamics regulates cellular fatty acid uptake. Proceedings of the United States of America, 2020, 117, 7471-7481.	7.1	41
71	Vesicle uncoating regulated by <scp>SH</scp> 3― <scp>SH</scp> 3 domainâ€mediated complex formation between endophilin and intersectin at synapses. EMBO Reports, 2015, 16, 232-239.	4.5	40
72	Intersectin 1 is a component of the Reelin pathway to regulate neuronal migration and synaptic plasticity in the hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5533-5538.	7.1	40

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73	Stonins—Specialized Adaptors for Synaptic Vesicle Recycling and Beyond?. Traffic, 2010, 11, 8-15.	2.7	39
74	Phosphatidylinositol 4,5-bisphosphate optical uncaging potentiates exocytosis. ELife, 2017, 6, .	6.0	39
75	Phosphoinositide switches in endocytosis and in the endolysosomal system. Current Opinion in Cell Biology, 2019, 59, 50-57.	5.4	38
76	PI(3,4)P2-mediated cytokinetic abscission prevents early senescence and cataract formation. Science, 2021, 374, eabk0410.	12.6	37
77	Turning CALM into excitement: AP180 and CALM in endocytosis and disease. Biology of the Cell, 2012, 104, 588-602.	2.0	36
78	Endocytosis in the adaptation to cellular stress. Cell Stress, 2020, 4, 230-247.	3.2	36
79	A Presynaptic Role for the Cytomatrix Protein GIT in Synaptic Vesicle Recycling. Cell Reports, 2014, 7, 1417-1425.	6.4	35
80	Protein kinase N controls a lysosomal lipid switch to facilitate nutrient signalling via mTORC1. Nature Cell Biology, 2019, 21, 1093-1101.	10.3	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.	14.5	35
82	Phosphoinositides in the control of lysosome function and homeostasis. Biochemical Society Transactions, 2019, 47, 1173-1185.	3.4	33
83	Spermidine protects from age-related synaptic alterations at hippocampal mossy fiber-CA3 synapses. Scientific Reports, 2019, 9, 19616.	3.3	33
84	Endocytic regulation of cellular ion homeostasis controls lysosome biogenesis. Nature Cell Biology, 2020, 22, 815-827.	10.3	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.	7.0	32
86	The INPP4B Tumor Suppressor Modulates EGFR Trafficking and Promotes Triple-Negative Breast Cancer. Cancer Discovery, 2020, 10, 1226-1239.	9.4	32
87	Multicolor Caged dSTORM Resolves the Ultrastructure of Synaptic Vesicles in the Brain. Angewandte Chemie - International Edition, 2015, 54, 13230-13235.	13.8	31
88	A putative role for intramolecular regulatory mechanisms in the adaptor function of amphiphysin in endocytosis. Neuropharmacology, 2003, 45, 787-796.	4.1	30
89	Molecular Basis for Association of PIPKIÎ ³ -p90 with Clathrin Adaptor AP-2. Journal of Biological Chemistry, 2010, 285, 2734-2749.	3.4	27
90	Inositol triphosphate-triggered calcium release blocks lipid exchange at endoplasmic reticulum-Golgi contact sites. Nature Communications, 2021, 12, 2673.	12.8	27

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91	Endophilin-A coordinates priming and fusion of neurosecretory vesicles via intersectin. Nature Communications, 2020, 11, 1266.	12.8	26
92	The axonal endolysosomal and autophagic systems. Journal of Neurochemistry, 2021, 158, 589-602.	3.9	24
93	Intersectin-Mediated Clearance of SNARE Complexes Is Required for Fast Neurotransmission. Cell Reports, 2020, 30, 409-420.e6.	6.4	22
94	Cargo Takes Control of Endocytosis. Cell, 2006, 127, 35-37.	28.9	19
95	Rab35-regulated lipid turnover by myotubularins represses mTORC1 activity and controls myelin growth. Nature Communications, 2020, 11, 2835.	12.8	19
96	Mechanism of synaptic protein turnover and its regulation by neuronal activity. Current Opinion in Neurobiology, 2021, 69, 76-83.	4.2	18
97	Neurotransmission: Spontaneous and Evoked Release Filing for Divorce. Current Biology, 2014, 24, R192-R194.	3.9	17
98	The cell adhesion protein CAR is a negative regulator of synaptic transmission. Scientific Reports, 2019, 9, 6768.	3.3	17
99	Nanoscale coupling of endocytic pit growth and stability. Science Advances, 2019, 5, eaax5775.	10.3	17
100	Dysregulation of myelin synthesis and actomyosin function underlies aberrant myelin in CMT4B1 neuropathy. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	17
101	On the endocytosis rollercoaster. Nature, 2015, 517, 446-447.	27.8	15
102	Vps34 derived phosphatidylinositol 3â€monophosphate modulates megakaryocyte maturation and proplatelet production through late endosomes/lysosomes. Journal of Thrombosis and Haemostasis, 2020, 18, 1756-1772.	3.8	15
103	Phosphatidylinositol 3,4-bisphosphate synthesis and turnover are spatially segregated in the endocytic pathway. Journal of Biological Chemistry, 2020, 295, 1091-1104.	3.4	15
104	Structural basis of phosphatidylinositol 3-kinase C2α function. Nature Structural and Molecular Biology, 2022, 29, 218-228.	8.2	14
105	Phosphatidylinositol 3,4-bisphosphate synthesis and turnover are spatially segregated in the endocytic pathway. Journal of Biological Chemistry, 2020, 295, 1091-1104.	3.4	12
106	The molecular mechanisms mediating class II PI 3â€kinase function in cell physiology. FEBS Journal, 2021, 288, 7025-7042.	4.7	12
107	Clathrin-independent endocytic retrieval of SV proteins mediated by the clathrin adaptor AP-2 at mammalian central synapses. ELife, 2022, 11, .	6.0	12
108	Sulfonated red and far-red rhodamines to visualize SNAP- and Halo-tagged cell surface proteins. Organic and Biomolecular Chemistry, 2022, 20, 5967-5980.	2.8	12

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109	Selective endocytosis of Ca ²⁺ -permeable AMPARs by the Alzheimer's disease risk factor CALM bidirectionally controls synaptic plasticity. Science Advances, 2022, 8, .	10.3	12
110	Local synthesis of the phosphatidylinositol-3,4-bisphosphate lipid drives focal adhesion turnover. Developmental Cell, 2022, 57, 1694-1711.e7.	7.0	11
111	A Novel Subtype of AP-1-binding Motif within the Palmitoylated trans-Golgi Network/Endosomal Accessory Protein Gadkin/γ-BAR. Journal of Biological Chemistry, 2010, 285, 4074-4086.	3.4	10
112	Defective lipid signalling caused by mutations in <i>PIK3C2B</i> underlies focal epilepsy. Brain, 2022, 145, 2313-2331.	7.6	10
113	Phosphoinositide Conversion Inactivates Râ€RAS and Drives Metastases in Breast Cancer. Advanced Science, 2022, 9, e2103249.	11.2	8
114	Liquid-like protein assemblies initiate endocytosis. Nature Cell Biology, 2021, 23, 301-302.	10.3	7
115	Inositol triphosphate–triggered calcium release from the endoplasmic reticulum induces lysosome biogenesis via TFEB/TFE3. Journal of Biological Chemistry, 2022, 298, 101740.	3.4	7
116	SynActJ: Easy-to-Use Automated Analysis of Synaptic Activity. Frontiers in Computer Science, 2021, 3, .	2.8	6
117	Neuronal autophagy controls the axonal endoplasmic reticulum to regulate neurotransmission in healthy neurons. Autophagy, 2021, 17, 1049-1051.	9.1	5
118	Endosomal phosphatidylinositol 3â€phosphate controls synaptic vesicle cycling and neurotransmission. EMBO Journal, 2022, 41, e109352.	7.8	5
119	Exon Inclusion Modulates Conformational Plasticity and Autoinhibition of the Intersectin 1 SH3A Domain. Structure, 2019, 27, 977-987.e5.	3.3	4
120	Mechanical signals regulate TORC2 activity. Nature Cell Biology, 2018, 20, 994-995.	10.3	3
121	A Novel Twist in Membrane dePHormation. Developmental Cell, 2014, 31, 3-4.	7.0	2
122	Autophagosome Formation by Endophilin Keeps Synapses in Shape. Neuron, 2016, 92, 675-677.	8.1	2
123	A lipid off-switch for mTORC1. Molecular and Cellular Oncology, 2017, 4, e1356899.	0.7	2
124	A Golgi-associated lipid kinase controls peripheral nerve myelination. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30873-30875.	7.1	2
125	Ramping up the autophagy-lysosome system to cope with osmotic stress. Autophagy, 2020, 16, 1921-1922.	9.1	1
107	The tertaice and the hare revisited Elife 2012 2 c01222		1

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127	Neuronal functions of clathrin-associated endocytic sorting adaptors– from molecules to disease. Neuroforum, 2020, 26, 209-217.	0.3	1
128	Inositol Triphosphate Signaling Triggers Lysosome Biogenesis Via Calcium Release from Endoplasmic Reticulum Stores. Contact (Thousand Oaks (Ventura County, Calif)), 2022, 5, 251525642210970.	1.3	1
129	Hopping Pits Catch Fusing Granules. Developmental Cell, 2015, 35, 10-11.	7.0	0
130	A mechanochemical mechanism couples exocrine secretion to endocytic membrane retrieval. Developmental Cell, 2021, 56, 1557-1559.	7.0	0