Reinhard Jahn

List of Publications by Citations

264 papers	34,171 citations	90 h-index	182 g-index
291 ext. papers	37,630 ext. citations	12.5 avg, IF	7.18 L-index

#	Paper	IF	Citations
264	Crystal structure of a SNARE complex involved in synaptic exocytosis at 2.4 A resolution. *Nature*, **1998**, 395, 347-53	50.4	1929
263	SNAREs--engines for membrane fusion. *Nature Reviews Molecular Cell Biology*, **2006**, 7, 631-43	48.7	1842
262	Molecular anatomy of a trafficking organelle. *Cell*, **2006**, 127, 831-46	56.2	1670
261	Membrane fusion. *Cell*, **2003**, 112, 519-33	56.2	1227
260	Botulinum neurotoxin A selectively cleaves the synaptic protein SNAP-25. *Nature*, **1993**, 365, 160-3	50.4	1033
259	Membrane fusion and exocytosis. *Annual Review of Biochemistry*, **1999**, 68, 863-911	29.1	1029
258	STED microscopy reveals that synaptotagmin remains clustered after synaptic vesicle exocytosis. *Nature*, **2006**, 440, 935-9	50.4	851
257	Phospholipid binding by a synaptic vesicle protein homologous to the regulatory region of protein kinase C. *Nature*, **1990**, 345, 260-3	50.4	735
256	Identification of a vesicular glutamate transporter that defines a glutamatergic phenotype in neurons. *Nature*, **2000**, 407, 189-94	50.4	703
255	Molecular machines governing exocytosis of synaptic vesicles. *Nature*, **2012**, 490, 201-7	50.4	668
254	Structure and conformational changes in NSF and its membrane receptor complexes visualized by quick-freeze/deep-etch electron microscopy. *Cell*, **1997**, 90, 523-35	56.2	667
253	Video-rate far-field optical nanoscopy dissects synaptic vesicle movement. *Science*, **2008**, 320, 246-9	33.3	612
252	Vesicle fusion from yeast to man. *Nature*, **1994**, 370, 191-3	50.4	599
251	Proteins of synaptic vesicles involved in exocytosis and membrane recycling. *Neuron*, **1991**, 6, 665-77	13.9	499
250	Cellubrevin is a ubiquitous tetanus-toxin substrate homologous to a putative synaptic vesicle fusion protein. *Nature*, **1993**, 364, 346-9	50.4	448
249	Disruption of ClC-3, a chloride channel expressed on synaptic vesicles, leads to a loss of the hippocampus. *Neuron*, **2001**, 29, 185-96	13.9	435
248	Membrane protein sequestering by ionic protein-lipid interactions. *Nature*, **2011**, 479, 552-5	50.4	420

247	A small GTP-binding protein dissociates from synaptic vesicles during exocytosis. *Nature*, **1991**, 349, 79-81	50.4	419
246	Macromolecular-scale resolution in biological fluorescence microscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 11440-5	11.5	404
245	A broken alpha -helix in folded alpha -Synuclein. *Journal of Biological Chemistry*, **2003**, 278, 15313-8	5.4	376
244	Real-time measurement of transmitter release from single synaptic vesicles. *Nature*, **1995**, 377, 62-5	50.4	357
243	Neurotransmitter release - four years of SNARE complexes. *Current Opinion in Neurobiology*, **1997**, 7, 310-5	7.6	340
242	Identification of differentiation-associated brain-specific phosphate transporter as a second vesicular glutamate transporter (VGLUT2). *Journal of Neuroscience*, **2001**, 21, RC182	6.6	325
241	Helical extension of the neuronal SNARE complex into the membrane. *Nature*, **2009**, 460, 525-8	50.4	311
240	Ca2+ regulates the interaction between synaptotagmin and syntaxin 1. *Journal of Biological Chemistry*, **1995**, 270, 23667-71	5.4	309
239	Clostridial neurotoxins: new tools for dissecting exocytosis. *Trends in Cell Biology*, **1994**, 4, 179-85	18.3	306
238	Structural changes are associated with soluble N-ethylmaleimide-sensitive fusion protein attachment protein receptor complex formation. *Journal of Biological Chemistry*, **1997**, 272, 28036-41	5.4	269
237	Tetanus toxin action: inhibition of neurotransmitter release linked to synaptobrevin proteolysis. *Biochemical and Biophysical Research Communications*, **1992**, 189, 1017-23	3.4	262
236	Inhibition of SNARE complex assembly differentially affects kinetic components of exocytosis. *Cell*, **1999**, 99, 713-22	56.2	255
235	A synaptic vesicle membrane protein is conserved from mammals to Drosophila. *Neuron*, **1989**, 2, 1475-81	13.9	252
234	Synaptic vesicles immunoisolated from rat cerebral cortex contain high levels of glutamate. *Neuron* , **1989**, 3, 715-20	13.9	248
233	Mixed and non-cognate SNARE complexes. Characterization of assembly and biophysical properties. *Journal of Biological Chemistry*, **1999**, 274, 15440-6	5.4	241
232	Structure of the ATP-dependent oligomerization domain of N-ethylmaleimide sensitive factor complexed with ATP. *Nature Structural Biology*, **1998**, 5, 803-11		215
231	A complete genetic analysis of neuronal Rab3 function. *Journal of Neuroscience*, **2004**, 24, 6629-37	6.6	213
230	Identification of a minimal core of the synaptic SNARE complex sufficient for reversible assembly and disassembly. *Biochemistry*, **1998**, 37, 10354-62	3.2	210

229	Crystal structure of the endosomal SNARE complex reveals common structural principles of all SNAREs. *Nature Structural Biology*, **2002**, 9, 107-11		207
228	Amino acid neurotransmission: spotlight on synaptic vesicles. *Trends in Neurosciences*, **1990**, 13, 83-7	13.3	206
227	Two-color far-field fluorescence nanoscopy. *Biophysical Journal*, **2007**, 92, L67-9	2.9	205
226	CASK Functions as a Mg2+-independent neurexin kinase. *Cell*, **2008**, 133, 328-39	56.2	204
225	One SNARE complex is sufficient for membrane fusion. *Nature Structural and Molecular Biology*, **2010**, 17, 358-64	17.6	203
224	The N-ethylmaleimide-sensitive fusion protein and alpha-SNAP induce a conformational change in syntaxin. *Journal of Biological Chemistry*, **1995**, 270, 16955-61	5.4	185
223	Phosphatidylinositol 4,5-bisphosphate clusters act as molecular beacons for vesicle recruitment. *Nature Structural and Molecular Biology*, **2013**, 20, 679-86	17.6	184
222	Plasmalemmal phosphatidylinositol-4,5-bisphosphate level regulates the releasable vesicle pool size in chromaffin cells. *Journal of Neuroscience*, **2005**, 25, 2557-65	6.6	181
221	Synaptic targeting of rabphilin-3A, a synaptic vesicle Ca2+/phospholipid-binding protein, depends on rab3A/3C. *Neuron*, **1994**, 13, 885-98	13.9	181
220	16-BAC/SDS-PAGE: a two-dimensional gel electrophoresis system suitable for the separation of integral membrane proteins. *Analytical Biochemistry*, **1996**, 240, 126-33	3.1	180
219	Rab proteins in regulated exocytosis. *Trends in Biochemical Sciences*, **1994**, 19, 164-8	10.3	179
218	Molecular cloning and functional characterization of human vesicular glutamate transporter 3. *EMBO Reports*, **2002**, 3, 798-803	6.5	178
217	Quantal release of serotonin. *Neuron*, **2000**, 28, 205-20	13.9	173
216	Membrane fusion intermediates via directional and full assembly of the SNARE complex. *Science*, **2012**, 336, 1581-4	33.3	168
215	Membrane fusion. *Current Opinion in Cell Biology*, **2002**, 14, 488-95	9	167
214	Determinants of liposome fusion mediated by synaptic SNARE proteins. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 2858-63	11.5	164
213	A novel function for the second C2 domain of synaptotagmin. Ca2+-triggered dimerization. *Journal of Biological Chemistry*, **1996**, 271, 5844-9	5.4	162
212	GABA and glycine in synaptic vesicles: storage and transport characteristics. *Neuron*, **1991**, 7, 287-93	13.9	155

211	Imaging direct, dynamin-dependent recapture of fusing secretory granules on plasma membrane lawns from PC12 cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 16806-11	11.5	149
210	Immunoisolation of GABA-specific synaptic vesicles defines a functionally distinct subset of synaptic vesicles. *Journal of Neuroscience*, **2000**, 20, 4904-11	6.6	148
209	SynGO: An Evidence-Based, Expert-Curated Knowledge Base for the Synapse. *Neuron*, **2019**, 103, 217-234.e4	13.9	147
208	The synaptophysin-synaptobrevin complex: a hallmark of synaptic vesicle maturation. *Journal of Neuroscience*, **1999**, 19, 1922-31	6.6	147
207	Interaction of synaptotagmin with the cytoplasmic domains of neurexins. *Neuron*, **1993**, 10, 307-15	13.9	146
206	A structural change occurs upon binding of syntaxin to SNAP-25. *Journal of Biological Chemistry*, **1997**, 272, 4582-90	5.4	137
205	Synaptotagmin activates membrane fusion through a Ca2+-dependent trans interaction with phospholipids. *Nature Structural and Molecular Biology*, **2007**, 14, 904-11	17.6	137
204	Botulinum neurotoxins C, E and F bind gangliosides via a conserved binding site prior to stimulation-dependent uptake with botulinum neurotoxin F utilising the three isoforms of SV2 as second receptor. *Journal of Neurochemistry*, **2009**, 110, 1942-54	6	134
203	Selective interaction of complexin with the neuronal SNARE complex. Determination of the binding regions. *Journal of Biological Chemistry*, **2000**, 275, 19808-18	5.4	134
202	The 2018 biomembrane curvature and remodeling roadmap. *Journal Physics D: Applied Physics*, **2018**, 51,	3	133
201	SNAREs prefer liquid-disordered over "raft" (liquid-ordered) domains when reconstituted into giant unilamellar vesicles. *Journal of Biological Chemistry*, **2004**, 279, 37951-5	5.4	132
200	The R-SNARE endobrevin/VAMP-8 mediates homotypic fusion of early endosomes and late endosomes. *Molecular Biology of the Cell*, **2000**, 11, 3289-98	3.5	129
199	Localization versus function of Rab3 proteins. Evidence for a common regulatory role in controlling fusion. *Journal of Biological Chemistry*, **2002**, 277, 40919-29	5.4	127
198	Export of cellubrevin from the endoplasmic reticulum is controlled by BAP31. *Journal of Cell Biology*, **1997**, 139, 1397-410	7.3	126
197	Methods for studying synaptosomal copper release. *Journal of Neuroscience Methods*, **2003**, 128, 159-72	3	126
196	Storage and uptake of D-serine into astrocytic synaptic-like vesicles specify gliotransmission. *Journal of Neuroscience*, **2013**, 33, 3413-23	6.6	125
195	Quantitative comparison of glutamatergic and GABAergic synaptic vesicles unveils selectivity for few proteins including MAL2, a novel synaptic vesicle protein. *Journal of Neuroscience*, **2010**, 30, 2-12	6.6	125
194	SNARE assembly and disassembly exhibit a pronounced hysteresis. *Nature Structural Biology*, **2002**, 9, 144-51		124

193	Two synaptobrevin molecules are sufficient for vesicle fusion in central nervous system synapses. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 14318-23	11.5	122
192	Distinct kinetic changes in neurotransmitter release after SNARE protein cleavage. *Science*, **2005**, 309, 491-4	33.3	120
191	The GTPase Rab26 links synaptic vesicles to the autophagy pathway. *ELife*, **2015**, 4, e05597	8.9	108
190	Homotypic fusion of early endosomes: SNAREs do not determine fusion specificity. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 2701-6	11.5	108
189	Rab3D is not required for exocrine exocytosis but for maintenance of normally sized secretory granules. *Molecular and Cellular Biology*, **2002**, 22, 6487-97	4.8	105
188	NSF N-terminal domain crystal structure: models of NSF function. *Molecular Cell*, **1999**, 4, 97-107	17.6	104
187	Molecular profiling of synaptic vesicle docking sites reveals novel proteins but few differences between glutamatergic and GABAergic synapses. *Neuron*, **2013**, 78, 285-97	13.9	103
186	Rapid and selective binding to the synaptic SNARE complex suggests a modulatory role of complexins in neuroexocytosis. *Journal of Biological Chemistry*, **2002**, 277, 7838-48	5.4	103
185	The R-SNARE motif of tomosyn forms SNARE core complexes with syntaxin 1 and SNAP-25 and down-regulates exocytosis. *Journal of Biological Chemistry*, **2003**, 278, 31159-66	5.4	101
184	Divergent functions of neuronal Rab11b in Ca2+-regulated versus constitutive exocytosis. *Journal of Neuroscience*, **2003**, 23, 10531-9	6.6	99
183	Munc18-bound syntaxin readily forms SNARE complexes with synaptobrevin in native plasma membranes. *PLoS Biology*, **2006**, 4, e330	9.7	99
182	Synaptotagmin-1 may be a distance regulator acting upstream of SNARE nucleation. *Nature Structural and Molecular Biology*, **2011**, 18, 805-12	17.6	98
181	Homo- and heterooligomeric SNARE complexes studied by site-directed spin labeling. *Journal of Biological Chemistry*, **2001**, 276, 13169-77	5.4	98
180	SNAREs in native plasma membranes are active and readily form core complexes with endogenous and exogenous SNAREs. *Journal of Cell Biology*, **2002**, 158, 751-60	7.3	97
179	Synaptic and vesicular co-localization of the glutamate transporters VGLUT1 and VGLUT2 in the mouse hippocampus. *Journal of Neurochemistry*, **2006**, 99, 1011-8	6	95
178	Sec1/Munc18 proteins: mediators of membrane fusion moving to center stage. *Neuron*, **2000**, 27, 201-4	13.9	95
177	Subcellular localization of tetanus neurotoxin-insensitive vesicle-associated membrane protein (VAMP)/VAMP7 in neuronal cells: evidence for a novel membrane compartment. *Journal of Neuroscience*, **1999**, 19, 9803-12	6.6	93
176	Core proteins of the secretory machinery. *Handbook of Experimental Pharmacology*, **2008**, 107-27	3.2	92

175	rab3A attachment to the synaptic vesicle membrane mediated by a conserved polyisoprenylated carboxy-terminal sequence. *Neuron*, **1991**, 7, 101-9	13.9	91
174	The Ca2+ affinity of synaptotagmin 1 is markedly increased by a specific interaction of its C2B domain with phosphatidylinositol 4,5-bisphosphate. *Journal of Biological Chemistry*, **2009**, 284, 25749-60	5.4	90
173	The riddle of the Sec1/Munc-18 proteins - new twists added to their interactions with SNAREs. *Trends in Biochemical Sciences*, **2003**, 28, 113-6	10.3	90
172	A cell-free system for regulated exocytosis in PC12 cells. *Journal of Cell Biology*, **2000**, 148, 317-24	7.3	90
171	Hydrophobic mismatch sorts SNARE proteins into distinct membrane domains. *Nature Communications*, **2015**, 6, 5984	17.4	89
170	Kiss-and-run, collapse and 'readily retrievable' vesicles. *Traffic*, **2007**, 8, 1137-44	5.7	88
169	Rabphilin regulates SNARE-dependent re-priming of synaptic vesicles for fusion. *EMBO Journal*, **2006**, 25, 2856-66	13	88
168	Synaptic vesicle traffic: rush hour in the nerve terminal. *Journal of Neurochemistry*, **1993**, 61, 12-21	6	88
167	Phosphatidylinositol 4,5-bisphosphate increases Ca2+ affinity of synaptotagmin-1 by 40-fold. *Journal of Biological Chemistry*, **2012**, 287, 16447-53	5.4	86
166	Quantitation of nerve terminal populations: synaptic vesicle-associated proteins as markers for synaptic density in the rat neostriatum. *Synapse*, **1988**, 2, 516-20	2.4	82
165	Dynamic structure of lipid-bound synaptobrevin suggests a nucleation-propagation mechanism for trans-SNARE complex formation. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 20306-11	11.5	81
164	The secretory granule protein syncollin binds to syntaxin in a Ca2(+)-sensitive manner. *Cell*, **1997**, 90, 325-33	56.2	79
163	Principles of exocytosis and membrane fusion. *Annals of the New York Academy of Sciences*, **2004**, 1014, 170-8	6.5	77
162	Identification of SNAP-47, a novel Qbc-SNARE with ubiquitous expression. *Journal of Biological Chemistry*, **2006**, 281, 17076-17083	5.4	76
161	Rab3D regulates a novel vesicular trafficking pathway that is required for osteoclastic bone resorption. *Molecular and Cellular Biology*, **2005**, 25, 5253-69	4.8	76
160	Synaptic PI(3,4,5)P3 is required for Syntaxin1A clustering and neurotransmitter release. *Neuron*, **2013**, 77, 1097-108	13.9	75
159	3D reconstruction of high-resolution STED microscope images. *Microscopy Research and Technique*, **2008**, 71, 644-50	2.8	75
158	Synaptotagmin, a synaptic vesicle protein, is present in human cerebrospinal fluid: a new biochemical marker for synaptic pathology in Alzheimer disease?. *Molecular and Chemical Neuropathology*, **1996**, 27, 195-210		75

157	Local externalization of phosphatidylserine mediates developmental synaptic pruning by microglia. *EMBO Journal*, **2020**, 39, e105380	13	75
156	Fusion of endosomes involved in synaptic vesicle recycling. *Molecular Biology of the Cell*, **1999**, 10, 3035-44	3.5	72
155	Unique luminal localization of VGAT-C terminus allows for selective labeling of active cortical GABAergic synapses. *Journal of Neuroscience*, **2008**, 28, 13125-31	6.6	71
154	A stable interaction between syntaxin 1a and synaptobrevin 2 mediated by their transmembrane domains. *FEBS Letters*, **1999**, 446, 40-4	3.8	70
153	The architecture of an excitatory synapse. *Journal of Cell Science*, **2010**, 123, 819-23	5.3	69
152	Fatty acylation of synaptotagmin in PC12 cells and synaptosomes. *Biochemical and Biophysical Research Communications*, **1996**, 225, 326-32	3.4	68
151	Quantitative analysis of synaptic vesicle Rabs uncovers distinct yet overlapping roles for Rab3a and Rab27b in Ca2+-triggered exocytosis. *Journal of Neuroscience*, **2010**, 30, 13441-53	6.6	67
150	The subcellular localizations of atypical synaptotagmins III and VI. Synaptotagmin III is enriched in synapses and synaptic plasma membranes but not in synaptic vesicles. *Journal of Biological Chemistry*, **1999**, 274, 18290-6	5.4	67
149	Specific protein phosphorylation during stimulation of amylase secretion by beta-agonists or dibutyryl adenosine 3R,5Rmonophosphate in the rat parotid gland. *FEBS Journal*, **1980**, 112, 345-52		67
148	Synaptotagmin-1 binds to PIP(2)-containing membrane but not to SNAREs at physiological ionic strength. *Nature Structural and Molecular Biology*, **2015**, 22, 815-23	17.6	66
147	Alzheimer amyloid protein precursor is localized in nerve terminal preparations to Rab5-containing vesicular organelles distinct from those implicated in the synaptic vesicle pathway. *Journal of Biological Chemistry*, **1996**, 271, 31783-6	5.4	66
146	Variable cooperativity in SNARE-mediated membrane fusion. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 12037-42	11.5	65
145	Live cell imaging by multifocal multiphoton microscopy. *European Journal of Cell Biology*, **2000**, 79, 726-34	3.1	65
144	The neuronal monoamine transporter VMAT2 is regulated by the trimeric GTPase Go(2). *Journal of Neuroscience*, **2000**, 20, 2131-41	6.6	64
143	Molecular mechanisms of clostridial neurotoxins. *Annals of the New York Academy of Sciences*, **1994**, 733, 245-55	6.5	64
142	Adrenocorticotropic hormone and alpha-melanocyte-stimulating hormone induce secretion and protein phosphorylation in the rat lacrimal gland by activation of a cAMP-dependent pathway. *FEBS Journal*, **1982**, 126, 623-9		63
141	Discrimination between docking and fusion of liposomes reconstituted with neuronal SNARE-proteins using FCS. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 18575-80	11.5	62
140	Use of G-protein fusions to monitor integral membrane protein-protein interactions in yeast. *Nature Biotechnology*, **2000**, 18, 1075-9	44.5	62

139	Localization of the mouse 5-hydroxytryptamine(1A) receptor in lipid microdomains depends on its palmitoylation and is involved in receptor-mediated signaling. *Molecular Pharmacology*, **2007**, 72, 502-13	4.3	61
138	Spring-loaded unraveling of a single SNARE complex by NSF in one round of ATP turnover. *Science*, **2015**, 347, 1485-9	33.3	60
137	Vesicular glutamate transporters use flexible anion and cation binding sites for efficient accumulation of neurotransmitter. *Neuron*, **2014**, 84, 1287-301	13.9	60
136	Synaptic vesicles are constitutively active fusion machines that function independently of Ca2+. *Current Biology*, **2008**, 18, 715-722	6.3	59
135	Early endosomal SNAREs form a structurally conserved SNARE complex and fuse liposomes with multiple topologies. *EMBO Journal*, **2007**, 26, 9-18	13	59
134	Synaptophysin immunoreactivity and small clear vesicles in neuroendocrine cells and related tumours. *Molecular and Cellular Probes*, **1987**, 1, 367-81	3.3	56
133	PtdInsP and PtdSer cooperate to trap synaptotagmin-1 to the plasma membrane in the presence of calcium. *ELife*, **2016**, 5,	8.9	55
132	Molecular determinants of exocytosis. *Pflugers Archiv European Journal of Physiology*, **2002**, 443, 333-8	4.6	54
131	Controlling synaptotagmin activity by electrostatic screening. *Nature Structural and Molecular Biology*, **2012**, 19, 991-7	17.6	53
130	Determinants of synaptobrevin regulation in membranes. *Molecular Biology of the Cell*, **2007**, 18, 2037-46	5.5	53
129	Evidence for early endosome-like fusion of recently endocytosed synaptic vesicles. *Traffic*, **2006**, 7, 1163-76	5.7	52
128	The N-terminal domains of syntaxin 7 and vti1b form three-helix bundles that differ in their ability to regulate SNARE complex assembly. *Journal of Biological Chemistry*, **2002**, 277, 36449-56	5.4	51
127	Cis- and trans-membrane interactions of synaptotagmin-1. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 11037-42	11.5	50
126	Distinct yet overlapping roles of Rab GTPases on synaptic vesicles. *Small GTPases*, **2011**, 2, 77-81	2.7	48
125	Ca2+ induces clustering of membrane proteins in the plasma membrane via electrostatic interactions. *EMBO Journal*, **2011**, 30, 1209-20	13	47
124	VAMP3 is associated with endothelial weibel-palade bodies and participates in their Ca(2+)-dependent exocytosis. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2011**, 1813, 1038-44	4.9	47
123	Inhibition of transmitter release correlates with the proteolytic activity of tetanus toxin and botulinus toxin A in individual cultured synapses of Hirudo medicinalis. *Journal of Neuroscience*, **1997**, 17, 1898-910	6.6	47
122	A dual function for Munc-18 in exocytosis of PC12 cells. *European Journal of Neuroscience*, **2005**, 21, 2419-32	3.3	47

121	Transmembrane domain peptide/peptide nucleic acid hybrid as a model of a SNARE protein in vesicle fusion. *Angewandte Chemie - International Edition*, **2011**, 50, 8597-601	16.4	45
120	Single-vesicle imaging reveals different transport mechanisms between glutamatergic and GABAergic vesicles. *Science*, **2016**, 351, 981-4	33.3	44
119	SNARE derived peptide mimic inducing membrane fusion. *Chemical Communications*, **2011**, 47, 9405-7	5.8	44
118	Endobrevin/VAMP8 mediates exocytotic release of hexosaminidase from rat basophilic leukaemia cells. *FEBS Letters*, **2007**, 581, 3479-84	3.8	43
117	The cDNA and derived amino acid sequences for rat and human synaptophysin. *Nucleic Acids Research*, **1987**, 15, 9607	20.1	43
116	The specificity of SNARE pairing in biological membranes is mediated by both proof-reading and spatial segregation. *EMBO Journal*, **2007**, 26, 3981-92	13	42
115	Reinvestigation of the role of snapin in neurotransmitter release. *Journal of Biological Chemistry*, **2004**, 279, 26251-6	5.4	42
114	Sorting in early endosomes reveals connections to docking- and fusion-associated factors. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 9697-702	11.5	41
113	Reconstitution of regulated exocytosis in cell-free systems: a critical appraisal. *Annual Review of Physiology*, **1999**, 61, 777-807	23.1	40
112	Plekhg5-regulated autophagy of synaptic vesicles reveals a pathogenic mechanism in motoneuron disease. *Nature Communications*, **2017**, 8, 678	17.4	39
111	Small-scale isolation of synaptic vesicles from mammalian brain. *Nature Protocols*, **2013**, 8, 998-1009	18.8	37
110	Evolution of CASK into a Mg2+-sensitive kinase. *Science Signaling*, **2010**, 3, ra33	8.8	37
109	A novel site of action for alpha-SNAP in the SNARE conformational cycle controlling membrane fusion. *Molecular Biology of the Cell*, **2008**, 19, 776-84	3.5	37
108	Galphao2 regulates vesicular glutamate transporter activity by changing its chloride dependence. *Journal of Neuroscience*, **2005**, 25, 4672-80	6.6	37
107	Structure parameters of synaptic vesicles quantified by small-angle x-ray scattering. *Biophysical Journal*, **2010**, 98, 1200-8	2.9	36
106	Endosomal fusion upon SNARE knockdown is maintained by residual SNARE activity and enhanced docking. *Traffic*, **2009**, 10, 1543-59	5.7	36
105	Review: Progresses in understanding N-ethylmaleimide sensitive factor (NSF) mediated disassembly of SNARE complexes. *Biopolymers*, **2016**, 105, 518-31	2.2	36
104	SNAREs define targeting specificity of trafficking vesicles by combinatorial interaction with tethering factors. *Nature Communications*, **2019**, 10, 1608	17.4	35

103	Functions of Rab Proteins at Presynaptic Sites. *Cells*, **2016**, 5,	7.9	35
102	Control of membrane gaps by synaptotagmin-Ca2+ measured with a novel membrane distance ruler. *Nature Communications*, **2014**, 5, 5859	17.4	34
101	Rapid fusion of synaptic vesicles with reconstituted target SNARE membranes. *Biophysical Journal*, **2013**, 104, 1950-8	2.9	34
100	The Habc domain and the SNARE core complex are connected by a highly flexible linker. *Biochemistry*, **2003**, 42, 4009-14	3.2	34
99	A convenient protocol for generating giant unilamellar vesicles containing SNARE proteins using electroformation. *Scientific Reports*, **2018**, 8, 9422	4.9	33
98	Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 5862-7	11.5	33
97	Synaptic vesicle proteins in exocytosis: what do we know?. *Current Opinion in Neurobiology*, **1993**, 3, 329-36	7.6	33
96	A fluorescence-based in vitro assay for investigating early endosome dynamics. *Nature Protocols*, **2010**, 5, 1127-37	18.8	32
95	Neuroscience. A neuronal receptor for botulinum toxin. *Science*, **2006**, 312, 540-1	33.3	32
94	Resolving single membrane fusion events on planar pore-spanning membranes. *Scientific Reports*, **2015**, 5, 12006	4.9	31
93	Functional reconstitution of the gamma-aminobutyric acid transporter from synaptic vesicles using artificial ion gradients. *Biochemistry*, **1991**, 30, 11795-800	3.2	31
92	Reconstitution of calcium-mediated exocytosis of dense-core vesicles. *Science Advances*, **2017**, 3, e1603208	10.3	30
91	Loss of the zymogen granule protein syncollin affects pancreatic protein synthesis and transport but not secretion. *Molecular and Cellular Biology*, **2002**, 22, 1545-54	4.8	30
90	Microdomains of SNARE proteins in the plasma membrane. *Current Topics in Membranes*, **2013**, 72, 193-230	2.2	28
89	Vesicle Adhesion and Fusion Studied by Small-Angle X-Ray Scattering. *Biophysical Journal*, **2018**, 114, 1908-1920	2.9	27
88	SNAP interferes with the zippering of the SNARE protein membrane fusion machinery. *Journal of Biological Chemistry*, **2014**, 289, 16326-35	5.4	26
87	Clathrin coat controls synaptic vesicle acidification by blocking vacuolar ATPase activity. *ELife*, **2018**, 7,	8.9	26
86	An activated Q-SNARE/SM protein complex as a possible intermediate in SNARE assembly. *EMBO Journal*, **2017**, 36, 1788-1802	13	25

85	Membrane tension increases fusion efficiency of model membranes in the presence of SNAREs. *Scientific Reports*, **2017**, 7, 12070	4.9	25
84	Direct targeting of membrane fusion by SNARE mimicry: Convergent evolution of Legionella effectors. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 8807-12	11.5	24
83	Organization and dynamics of SNARE proteins in the presynaptic membrane. *Frontiers in Physiology*, **2015**, 6, 89	4.6	24
82	SNARE function is not involved in early endosome docking. *Molecular Biology of the Cell*, **2008**, 19, 5327-37	3.5	24
81	Analysis of protein phosphorylation in nerve terminal reveals extensive changes in active zone proteins upon exocytosis. *ELife*, **2016**, 5,	8.9	24
80	Identification of functionally interacting SNAREs by using complementary substitutions in the conserved R0Rlayer. *Molecular Biology of the Cell*, **2005**, 16, 2263-74	3.5	23
79	Analysis of the association of syncollin with the membrane of the pancreatic zymogen granule. *Journal of Biological Chemistry*, **2000**, 275, 11306-11	5.4	23
78	A solid-phase assay for the phosphorylation of proteins blotted on nitrocellulose membrane filters. *Analytical Biochemistry*, **1986**, 158, 130-7	3.1	23
77	SLC10A4 is a vesicular amine-associated transporter modulating dopamine homeostasis. *Biological Psychiatry*, **2015**, 77, 526-36	7.9	22
76	Tctex-1, a novel interaction partner of Rab3D, is required for osteoclastic bone resorption. *Molecular and Cellular Biology*, **2011**, 31, 1551-64	4.8	22
75	Binding of Rab3A to synaptic vesicles. *Journal of Biological Chemistry*, **2000**, 275, 9433-40	5.4	22
74	Differential expression of active zone proteins in neuromuscular junctions suggests functional diversification. *European Journal of Neuroscience*, **2006**, 24, 3043-52	3.5	21
73	Vesicle Tethering on the Surface of Phase-Separated Active Zone Condensates. *Molecular Cell*, **2021**, 81, 13-24.e7	17.6	21
72	SNARE-mediated membrane fusion trajectories derived from force-clamp experiments. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13051-13056	11.5	20
71	Calcium Promotes the Formation of Syntaxin 1 Mesoscale Domains through Phosphatidylinositol 4,5-Bisphosphate. *Journal of Biological Chemistry*, **2016**, 291, 7868-76	5.4	20
70	Arrest of -SNARE zippering uncovers loosely and tightly docked intermediates in membrane fusion. *Journal of Biological Chemistry*, **2018**, 293, 8645-8655	5.4	19
69	Measuring Ca2+-induced structural changes in lipid monolayers: implications for synaptic vesicle exocytosis. *Biophysical Journal*, **2012**, 102, 1394-402	2.9	19
68	Counting the SNAREs needed for membrane fusion. *Journal of Molecular Cell Biology*, **2011**, 3, 204-5	6.3	19

67	Proton electrochemical gradient: Driving and regulating neurotransmitter uptake. *BioEssays*, **2017**, 39, 1600240	4.1	18
66	Synaptic membrane proteins form stable microdomains in early endosomes. *Microscopy Research and Technique*, **2010**, 73, 606-17	2.8	18
65	Rapid SNARE-Mediated Fusion of Liposomes and Chromaffin Granules with Giant Unilamellar Vesicles. *Biophysical Journal*, **2017**, 113, 1251-1259	2.9	17
64	In vitro fusion of single synaptic and dense core vesicles reproduces key physiological properties. *Nature Communications*, **2019**, 10, 3904	17.4	17
63	High- and Small-Molecular-Weight GTP-Binding Proteins in Zymogen Granule Membranes of Rat Pancreatic Acinar Cells. *Cellular Physiology and Biochemistry*, **1992**, 2, 77-89	3.9	17
62	Specific phosphorylation of a protein in calcium accumulating endoplasmic reticulum from rat parotid glands following stimulation by agonists involving cAMP as second messenger. *FEBS Letters* , **1984**, 166, 96-103	3.8	17
61	Hidden proteome of synaptic vesicles in the mammalian brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 33586-33596	11.5	17
60	Role of the transmembrane domain in SNARE protein mediated membrane fusion: peptide nucleic acid/peptide model systems. *Molecular BioSystems*, **2016**, 12, 2770-6		16
59	Elevated synaptic vesicle release probability in synaptophysin/gyrin family quadruple knockouts. *ELife*, **2019**, 8,	8.9	16
58	A sandwich enzyme-linked immunosorbent assay for the quantification of insoluble membrane and scaffold proteins. *Analytical Biochemistry*, **2010**, 402, 161-9	3.1	15
57	Probing and manipulating intracellular membrane traffic by microinjection of artificial vesicles. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E9883-E9892	11.5	14
56	Total Synthesis of Dansylated ParkB Nucleotide for High-Throughput MraY Assays. *Chemistry - A European Journal*, **2016**, 22, 17813-17819	4.8	14
55	Distance Regulated Vesicle Fusion and Docking Mediated by Peptide Nucleic Acid SNARE Protein Analogues. *ChemBioChem*, **2016**, 17, 479-85	3.8	14
54	Distribution of Rab3a in rat nervous system: comparison with other synaptic vesicle proteins and neuropeptides. *Brain Research*, **1996**, 706, 103-12	3.7	14
53	Molecular approaches to synaptic vesicle exocytosis. *Progress in Brain Research*, **1993**, 98, 235-40	2.9	14
52	Cross-linking mass spectrometry uncovers protein interactions and functional assemblies in synaptic vesicle membranes. *Nature Communications*, **2021**, 12, 858	17.4	14
51	Structural dynamics and transient lipid binding of synaptobrevin-2 tune SNARE assembly and membrane fusion. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 8699-8708	11.5	13
50	Dual and Direction-Selective Mechanisms of Phosphate Transport by the Vesicular Glutamate Transporter. *Cell Reports*, **2018**, 23, 535-545	10.6	13

49	Extended synaptotagmins (E-Syts): Architecture and dynamics of membrane contact sites revealed. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 4837-8	11.5	11
48	Regulation of protein kinases in exocrine secretory cells during agonist-induced exocytosis. *Advances in Enzyme Regulation*, **1985**, 23, 141-56		11
47	Is protein carboxymethylation involved in stimulus-secretion coupling?. *FEBS Letters*, **1981**, 123, 211-4	3.8	11
46	En route to dynamic life processes by SNARE-mediated fusion of polymer and hybrid membranes. *Nature Communications*, **2021**, 12, 4972	17.4	10
45	Docking of liposomes to planar surfaces mediated by trans-SNARE complexes. *Biophysical Journal*, **2008**, 95, 1295-302	2.9	9
44	Tetanus and botulinal neurotoxins. Tools to understand exocytosis in neurons. *Advances in Second Messenger and Phosphoprotein Research*, **1994**, 29, 47-58		9
43	Hybride aus Transmembranpeptiden und Peptidnucleinsäuren als Modellsystem für SNARE-Protein-vermittelte Vesikelfusion. *Angewandte Chemie*, **2011**, 123, 8756-8760	3.6	8
42	Vesicle transport: klarsicht clears up the matter. *Current Biology*, **1998**, 8, R542-4	6.3	8
41	Synaptic transmission: two players team up for a new tune. *Current Biology*, **1998**, 8, R856-8	6.3	8
40	Some classic papers in the field of membrane fusion--a personal view. *Nature Structural and Molecular Biology*, **2008**, 15, 655-7	17.6	8
39	VGLUTs--potential targets for the treatment of seizures?. *Neuron*, **2010**, 68, 6-8	13.9	7
38	A tethering complex recruits SNAREs and grabs vesicles. *Cell*, **2009**, 139, 1053-5	56.2	7
37	Into great silence without VGLUT3. *Neuron*, **2008**, 57, 173-4	13.9	7
36	Bioenergetic characterization of gamma-aminobutyric acid transporter of synaptic vesicles. *Methods in Enzymology*, **1998**, 296, 116-24	1.7	7
35	The Na+/H+ Exchanger Nhe1 Modulates Network Excitability via GABA Release. *Cerebral Cortex*, **2019**, 29, 4263-4276	5.1	7
34	PNA Hybrid Sequences as Recognition Units in SNARE-Protein-Mimicking Peptides. *Angewandte Chemie - International Edition*, **2018**, 57, 14932-14936	16.4	6
33	Complexins living up to their name--new light on their role in exocytosis. *Neuron*, **2009**, 64, 295-7	13.9	6
32	Reconstitution of SNARE proteins into solid-supported lipid bilayer stacks and X-ray structure analysis. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 566-578	3.8	6

31	Identification of distinct cytotoxic granules as the origin of supramolecular attack particles in T lymphocytes.. *Nature Communications*, **2022**, 13, 1029	17.4	6
30	Extreme parsimony in ATP consumption by 20S complexes in the global disassembly of single SNARE complexes. *Nature Communications*, **2021**, 12, 3206	17.4	5
29	Inside insight to membrane fusion. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 11729-30	11.5	4
28	Neuroscience. Synaptic vesicles in the fast lane. *Science*, **2004**, 303, 1986-7	33.3	4
27	An overview of the synaptic vesicle lipid composition. *Archives of Biochemistry and Biophysics*, **2021**, 709, 108966	4.1	4
26	Isolation of large dense-core vesicles from bovine adrenal medulla for functional studies. *Scientific Reports*, **2020**, 10, 7540	4.9	3
25	Active zone protein expression changes at the key stages of cerebellar cortex neurogenesis in the rat. *Acta Histochemica*, **2013**, 115, 616-25	2	3
24	Managing intracellular transport. *Worm*, **2013**, 2, e21564		3
23	Monoamine transmitter release from small synaptic and large dense-core vesicles. *Advances in Pharmacology*, **1998**, 42, 87-90	5.7	3
22	Recycling of synaptic vesicle membrane within nerve terminals. *Brain Research Bulletin*, **1999**, 50, 313-4	3.9	3
21	Tight docking of membranes before fusion represents a metastable state with unique properties. *Nature Communications*, **2021**, 12, 3606	17.4	3
20	SNARE-Mediated Fusion of Single Chromaffin Granules with Pore-Spanning Membranes. *Biophysical Journal*, **2019**, 116, 308-318	2.9	3
19	Vesicular Glutamate Transporters (SLCA17 A6, 7, 8) Control Synaptic Phosphate Levels. *Cell Reports* , **2021**, 34, 108623	10.6	3
18	PI(4,5)P-dependent regulation of exocytosis by amisyn, the vertebrate-specific competitor of synaptobrevin 2. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 13468-13479	11.5	2
17	Preparation of Synaptic Vesicles from Mammalian Brain **2006**, 85-90		2
16	Fusion of vacuoles--where are the membranes, and where are the holes?. *Developmental Cell*, **2002**, 2, 257-9	10.2	2
15	On the trail of the Ca2+ receptor(s) for exocytosis. *Seminars in Neuroscience*, **1994**, 6, 159-165		2
14	SNARE proteins: zip codes in vesicle targeting?. *Biochemical Journal*, **2022**, 479, 273-288	3.8	2

13	Protein Phosphorylation in Depolarized Synaptosomes: Dissecting Primary Effects of Calcium from Synaptic Vesicle Cycling. *Molecular and Cellular Proteomics*, **2021**, 20, 100061	7.6	2
12	Differential Diffusional Properties in Loose and Tight Docking Prior to Membrane Fusion. *Biophysical Journal*, **2020**, 119, 2431-2439	2.9	1
11	Molecular Regulation of Synaptic Release **2013**, 351-401		1
10	Distinguished scientists back Germany's DFG. *Nature*, **2000**, 404, 922	50.4	1
9	Local externalization of phosphatidylserine mediates developmental synaptic pruning by microglia		1
8	Selected tools to visualize membrane interactions. *European Biophysics Journal*, **2021**, 50, 211-222	1.9	1
7	Coordinated bi-directional trafficking of synaptic vesicle and active zone proteins in peripheral nerves. *Biochemical and Biophysical Research Communications*, **2021**, 559, 92-98	3.4	1
6	Isolation of Synaptic Vesicles from Mammalian Brain.. *Methods in Molecular Biology*, **2022**, 2417, 131-145	1.4	0
5	Molecular Regulation of Synaptic Release **2016**, 423-474		
4	PNA-Hybridsequenzen als Erkennungseinheiten in SNARE-Protein-analogen Peptiden. *Angewandte Chemie*, **2018**, 130, 15148-15152	3.6	
3	Molecular Mechanisms of Intracellular Membrane Fusion **2006**, 245-277		
2	Endosome Fusion **2006**, 50-61		
1	Characterization of PROPPIN-Phosphoinositide Binding by Stopped-Flow Fluorescence Spectroscopy. *Methods in Molecular Biology*, **2021**, 2251, 205-214	1.4	