Edwin R Chapman

List of Publications by Year
in descending order

169 papers	16,675 citations	13865 67 h-index	17105 122 g-index
265 all docs	265 docs citations	265 times ranked	10056 citing authors

#	Article	IF	Citations
1	Botulinum neurotoxin A selectively cleaves the synaptic protein SNAP-25. Nature, 1993, 365, 160-163.	27.8	1,145
2	SV2 Is the Protein Receptor for Botulinum Neurotoxin A. Science, 2006, 312, 592-596.	12.6	691
3	How Does Synaptotagmin Trigger Neurotransmitter Release?. Annual Review of Biochemistry, 2008, 77, 615-641.	11.1	480
4	Synaptotagmin: A Ca2+ sensor that triggers exocytosis?. Nature Reviews Molecular Cell Biology, 2002, 3, 498-508.	37.0	413
5	Synaptophysin Regulates the Kinetics of Synaptic Vesicle Endocytosis in Central Neurons. Neuron, 2011, 70, 847-854.	8.1	361
6	PIP2 increases the speed of response of synaptotagmin and steers its membrane-penetration activity toward the plasma membrane. Nature Structural and Molecular Biology, 2004, 11, 36-44.	8.2	354
7	Reconstitution of Ca2+-Regulated Membrane Fusion by Synaptotagmin and SNAREs. Science, 2004, 304, 435-438.	12.6	346
8	Ca2+ Regulates the Interaction between Synaptotagmin and Syntaxin 1. Journal of Biological Chemistry, 1995, 270, 23667-23671.	3.4	338
9	The t-SNAREs syntaxin 1 and SNAP-25 are present on organelles that participate in synaptic vesicle recycling.. Journal of Cell Biology, 1995, 128, 637-645.	5.2	325
10	Transmembrane Segments of Syntaxin Line the Fusion Pore of Ca2+-Triggered Exocytosis. Science, 2004, 304, 289-292.	12.6	320
11	Stability, affinity, and chromatic variants of the glutamate sensor iGluSnFR. Nature Methods, 2018, 15, 936-939.	19.0	310
12	Synaptotagmin Modulation of Fusion Pore Kinetics in Regulated Exocytosis of Dense-Core Vesicles. Science, 2001, 294, 1111-1115.	12.6	278
13	Synaptotagmins I and II mediate entry of botulinum neurotoxin B into cells. Journal of Cell Biology, 2003, 162, 1293-1303.	5.2	278
14	Kinetics of Synaptotagmin Responses to Ca2+ and Assembly with the Core SNARE Complex onto Membranes. Neuron, 1999, 24, 363-376.	8.1	258
15	Synaptotagmin-Mediated Bending of the Target Membrane Is a Critical Step in Ca2+-Regulated Fusion. Cell, 2009, 138, 709-721.	28.9	257
16	Direct Interaction of a Ca2+-binding Loop of Synaptotagmin with Lipid Bilayers. Journal of Biological Chemistry, 1998, 273, 13995-14001.	3.4	233
17	Glycosylated SV2A and SV2B Mediate the Entry of Botulinum Neurotoxin E into Neurons. Molecular Biology of the Cell, 2008, 19, 5226-5237.	2.1	218
18	Different domains of synaptotagmin control the choice between kiss-and-run and full fusion. Nature, 2003, 424, 943-947.	27.8	200

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19	Temperature-Sensitive Paralytic Mutations Demonstrate that Synaptic Exocytosis Requires SNARE Complex Assembly and Disassembly. Neuron, 1998, 21, 401-413.	8.1	198
20	Synaptic targeting of rabphilin-3A, a synaptic vesicle Ca2+/phospholipid-binding protein, depends on rab3A/3C. Neuron, 1994, 13, 885-898.	8.1	193
21	Structural basis of cell surface receptor recognition by botulinum neurotoxin B. Nature, 2006, 444, 1096-1100.	27.8	190
22	Doc2 Is a Ca2+ Sensor Required for Asynchronous Neurotransmitter Release. Cell, 2011, 147, 666-677.	28.9	186
23	Synaptotagmin arrests the SNARE complex before triggering fast, efficient membrane fusion in response to Ca2+. Nature Structural and Molecular Biology, 2008, 15, 827-835.	8.2	182
24	A Novel Function for the Second C2 Domain of Synaptotagmin. Journal of Biological Chemistry, 1996, 271, 5844-5849.	3.4	180
25	FUSION PORES AND FUSION MACHINES IN CA2+-TRIGGERED EXOCYTOSIS. Annual Review of Biophysics and Biomolecular Structure, 2006, 35, 135-160.	18.3	176
26	Fusion Pore Dynamics Are Regulated by Synaptotagminâ€¢t-SNARE Interactions. Neuron, 2004, 41, 929-942.	8.1	174
27	Synaptotagmin-IV modulates synaptic function and long-term potentiation by regulating BDNF release. Nature Neuroscience, 2009, 12, 767-776.	14.8	174
28	Three distinct kinetic groupings of the synaptotagmin family: Candidate sensors for rapid and delayed exocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5210-5214.	7.1	164
29	Ca2+â€“synaptotagmin directly regulates t-SNARE function during reconstituted membrane fusion. Nature Structural and Molecular Biology, 2006, 13, 323-330.	8.2	164
30	Delineation of the Oligomerization, AP-2 Binding, and Synprint Binding Region of the C2B Domain of Synaptotagmin. Journal of Biological Chemistry, 1998, 273, 32966-32972.	3.4	163
31	Deterministic HOX Patterning in Human Pluripotent Stem Cell-Derived Neuroectoderm. Stem Cell Reports, 2015, 4, 632-644.	4.8	162
32	CAPS Acts at a Prefusion Step in Dense-Core Vesicle Exocytosis as a PIP2 Binding Protein. Neuron, 2004, 43, 551-562.	8.1	161
33	synaptotagminMutants Reveal Essential Functions for the C2B Domain in Ca²⁺-Triggered Fusion and Recycling of Synaptic VesiclesIn Vivo. Journal of Neuroscience, 2001, 21, 1421-1433.	3.6	158
34	Synaptic function modulated by changes in the ratio of synaptotagmin I and IV. Nature, 1999, 400, 757-760.	27.8	149
35	The C2 domains of synaptotagmin â€“ partners in exocytosis. Trends in Biochemical Sciences, 2004, 29, 143-151.	7.5	147
36	SNARE-Driven, 25-Millisecond Vesicle Fusion In Vitro. Biophysical Journal, 2005, 89, 2458-2472.	0.5	141

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37	Ca2+ and synaptotagmin VIIâ€“dependent delivery of lysosomal membrane to nascent phagosomes. Journal of Cell Biology, 2006, 174, 997-1007.	5.2	137
38	Otoferlin is a calcium sensor that directly regulates SNARE-mediated membrane fusion. Journal of Cell Biology, 2010, 191, 187-197.	5.2	128
39	Synaptotagmin Isoforms Couple Distinct Ranges of Ca2+, Ba2+, and Sr2+ Concentration to SNARE-mediated Membrane Fusion. Molecular Biology of the Cell, 2005, 16, 4755-4764.	2.1	127
40	C2A activates a cryptic Ca2+-triggered membrane penetration activity within the C2B domain of synaptotagmin I. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1665-1670.	7.1	124
41	Role of synaptotagmin in Ca2+-triggered exocytosis. Biochemical Journal, 2002, 366, 1-13.	3.7	121
42	Functional cooperation of Î±-synuclein and VAMP2 in synaptic vesicle recycling. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11113-11115.	7.1	119
43	Using fluorescent sensors to detect botulinum neurotoxin activity in vitro and in living cells. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14701-14706.	7.1	118
44	The fusion pores of Ca2+-triggered exocytosis. Nature Structural and Molecular Biology, 2008, 15, 684-689.	8.2	118
45	The C2b Domain of Synaptotagmin Is a Ca2+â€“Sensing Module Essential for Exocytosis. Journal of Cell Biology, 2000, 150, 1125-1136.	5.2	117
46	Uncoupling the roles of synaptotagmin I during endo- and exocytosis of synaptic vesicles. Nature Neuroscience, 2012, 15, 243-249.	14.8	115
47	SNARE-complex disassembly by NSF follows synaptic-vesicle fusion. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 12233-12238.	7.1	114
48	SV2 Mediates Entry of Tetanus Neurotoxin into Central Neurons. PLoS Pathogens, 2010, 6, e1001207.	4.7	114
49	Two modes of exocytosis at hippocampal synapses revealed by rate of FM1-43 efflux from individual vesicles. Journal of Cell Biology, 2005, 168, 929-939.	5.2	109
50	Autapses and Networks of Hippocampal Neurons Exhibit Distinct Synaptic Transmission Phenotypes in the Absence of Synaptotagmin I. Journal of Neuroscience, 2009, 29, 7395-7403.	3.6	107
51	Control of Exocytosis by Synaptotagmins and Otoferlin in Auditory Hair Cells. Journal of Neuroscience, 2010, 30, 13281-13290.	3.6	106
52	Mechanism of botulinum neurotoxin B and G entry into hippocampal neurons. Journal of Cell Biology, 2007, 179, 1511-1522.	5.2	104
53	Dynamics and number of trans-SNARE complexes determine nascent fusion pore properties. Nature, 2018, 554, 260-263.	27.8	103
54	Synaptotagmin 7 functions as a Ca2+-sensor for synaptic vesicle replenishment. ELife, 2014, 3, e01524.	6.0	102

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55	The tandem C2 domains of synaptotagmin contain redundant Ca2+ binding sites that cooperate to engage t-SNAREs and trigger exocytosis. Journal of Cell Biology, 2001, 154, 1117-1124.	5.2	101
56	Identification of synaptotagmin effectors via acute inhibition of secretion from cracked PC12 cells. Journal of Cell Biology, 2003, 162, 199-209.	5.2	100
57	Ca2+-Triggered Simultaneous Membrane Penetration of the Tandem C2-Domains of Synaptotagmin I. Biophysical Journal, 2006, 91, 1767-1777.	0.5	100
58	Postsynaptic Neuroligin1 regulates presynaptic maturation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13564-13569.	7.1	95
59	Synaptotagmin-Ca2+triggers two sequential steps in regulated exocytosis in rat PC12 cells: fusion pore opening and fusion pore dilation. Journal of Physiology, 2006, 570, 295-307.	2.9	94
60	Inhibition of TFG function causes hereditary axon degeneration by impairing endoplasmic reticulum structure. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5091-5096.	7.1	90
61	Reconstituted synaptotagmin I mediates vesicle docking, priming, and fusion. Journal of Cell Biology, 2011, 195, 1159-1170.	5.2	89
62	Excitatory and Inhibitory Neurons Utilize Different Ca2+ Sensors and Sources to Regulate Spontaneous Release. Neuron, 2018, 98, 977-991.e5.	8.1	86
63	Membrane-embedded Synaptotagmin Penetrates cis ortrans Target Membranes and Clusters via a Novel Mechanism. Journal of Biological Chemistry, 2000, 275, 25427-25435.	3.4	82
64	Release mode of large and small dense-core vesicles specified by different synaptotagmin isoforms in PC12 cells. Molecular Biology of the Cell, 2011, 22, 2324-2336.	2.1	82
65	Mechanism and function of synaptotagmin-mediated membrane apposition. Nature Structural and Molecular Biology, 2011, 18, 813-821.	8.2	77
66	Visualization of synaptotagmin I oligomers assembled onto lipid monolayers. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2082-2087.	7.1	74
67	Membrane Penetration by Synaptotagmin Is Required for Coupling Calcium Binding to Vesicle FusionIn Vivo. Journal of Neuroscience, 2011, 31, 2248-2257.	3.6	74
68	Exocytotic fusion pores are composed of both lipids and proteins. Nature Structural and Molecular Biology, 2016, 23, 67-73.	8.2	74
69	Synaptotagmin 1 clamps synaptic vesicle fusion in mammalian neurons independent of complexin. Nature Communications, 2019, 10, 4076.	12.8	74
70	Fatty Acylation of Synaptotagmin in PC12 Cells and Synaptosomes. Biochemical and Biophysical Research Communications, 1996, 225, 326-332.	2.1	72
71	ESCRT-0 Assembles as a Heterotetrameric Complex on Membranes and Binds Multiple Ubiquitinylated Cargoes Simultaneously. Journal of Biological Chemistry, 2011, 286, 9636-9645.	3.4	72
72	Synaptotagmin VII Is Targeted to Secretory Organelles in PC12 Cells, Where It Functions as a High-Affinity Calcium Sensor. Molecular and Cellular Biology, 2005, 25, 8693-8702.	2.3	71

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73	Targeting of neuromodulin (GAP-43) fusion proteins to growth cones in cultured rat embryonic neurons. Neuron, 1991, 6, 411-420.	8.1	69
74	Synaptotagmin C2B Domain Regulates Ca2+-triggered Fusion in Vitro. Journal of Biological Chemistry, 2008, 283, 31763-31775.	3.4	69
75	Mutations in the Effector Binding Loops in the C2A and C2B Domains of Synaptotagmin I Disrupt Exocytosis in a Nonadditive Manner. Journal of Biological Chemistry, 2003, 278, 47030-47037.	3.4	68
76	Biophysical Characterization of Styryl Dye-Membrane Interactions. Biophysical Journal, 2009, 97, 101-109.	0.5	68
77	Lipid Mixing and Content Release in Single-Vesicle, SNARE-Driven Fusion Assay with 1â€“5 ms Resolution. Biophysical Journal, 2009, 96, 4122-4131.	0.5	67
78	Reduced mitochondrial fusion and Huntingtin levels contribute to impaired dendritic maturation and behavioral deficits in Fmr1-mutant mice. Nature Neuroscience, 2019, 22, 386-400.	14.8	67
79	Axonal and dendritic synaptotagmin isoforms revealed by a pHluorin-syt functional screen. Molecular Biology of the Cell, 2012, 23, 1715-1727.	2.1	66
80	Transport of a kinesin-cargo pair along microtubules into dendritic spines undergoing synaptic plasticity. Nature Communications, 2016, 7, 12741.	12.8	66
81	Calcium Binding by Synaptotagmin's C2A Domain is an Essential Element of the Electrostatic Switch That Triggers Synchronous Synaptic Transmission. Journal of Neuroscience, 2012, 32, 1253-1260.	3.6	64
82	Differential Distribution of Syntaxin Isoforms 1A and 1B in the Rat Central Nervous System. European Journal of Neuroscience, 1996, 8, 2544-2552.	2.6	62
83	Analysis of the Synaptotagmin Family during Reconstituted Membrane Fusion. Journal of Biological Chemistry, 2008, 283, 21799-21807.	3.4	62
84	Interneuronal Transfer and Distal Action of Tetanus Toxin and Botulinum Neurotoxins A and D in Central Neurons. Cell Reports, 2016, 16, 1974-1987.	6.4	62
85	Botulinum toxin type B micromechanosensor. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13621-13625.	7.1	61
86	Receptor Binding Enables Botulinum Neurotoxin B to Sense Low pH for Translocation Channel Assembly. Cell Host and Microbe, 2011, 10, 237-247.	11.0	61
87	Fluorescence energy transfer analysis of calmodulin.cntdot.peptide complexes. Biochemistry, 1992, 31, 12819-12825.	2.5	58
88	Distinct fusion properties of synaptotagmin-1 and synaptotagmin-7 bearing dense core granules. Molecular Biology of the Cell, 2014, 25, 2416-2427.	2.1	58
89	MARCKS-ED Peptide as a Curvature and Lipid Sensor. ACS Chemical Biology, 2013, 8, 218-225.	3.4	54
90	Synaptotagmin IV: a multifunctional regulator of peptidergic nerve terminals. Nature Neuroscience, 2009, 12, 163-171.	14.8	53

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91	Different states of synaptotagmin regulate evoked versus spontaneous release. Nature Communications, 2016, 7, 10971.	12.8	53
92	A Structural Role for the Synaptobrevin 2 Transmembrane Domain in Dense-Core Vesicle Fusion Pores. Journal of Neuroscience, 2015, 35, 5772-5780.	3.6	52
93	Phosphatidylserine Regulation of Ca2+-triggered Exocytosis and Fusion Pores in PC12 Cells. Molecular Biology of the Cell, 2009, 20, 5086-5095.	2.1	51
94	Sar1 GTPase Activity Is Regulated by Membrane Curvature. Journal of Biological Chemistry, 2016, 291, 1014-1027.	3.4	51
95	Linker mutations reveal the complexity of synaptotagmin 1 action during synaptic transmission. Nature Neuroscience, 2014, 17, 670-677.	14.8	50
96	Determining the pharmacokinetics of nicotinic drugs in the endoplasmic reticulum using biosensors. Journal of General Physiology, 2019, 151, 738-757.	1.9	50
97	Single Molecule Mechanical Probing of the SNARE Protein Interactions. Biophysical Journal, 2006, 91, 744-758.	0.5	49
98	Molecular Basis for Synaptotagmin-1-Associated Neurodevelopmental Disorder. Neuron, 2020, 107, 52-64.e7.	8.1	49
99	Expression of Mutant Huntingtin Blocks Exocytosis in PC12 Cells by Depletion of Complexin II. Journal of Biological Chemistry, 2003, 278, 30849-30853.	3.4	48
100	SNAP-23 Functions in Docking/Fusion of Granules at Low Ca2+. Molecular Biology of the Cell, 2004, 15, 1918-1930.	2.1	48
101	Productive Hemifusion Intermediates in Fast Vesicle Fusion Driven by Neuronal SNAREs. Biophysical Journal, 2008, 94, 1303-1314.	0.5	48
102	Synaptotagmin-7 Functions to Replenish Insulin Granules for Exocytosis in Human Islet Î²-Cells. Diabetes, 2016, 65, 1962-1976.	0.6	48
103	Distinct Subsets of Syt-IV/BDNF Vesicles Are Sorted to Axons versus Dendrites and Recruited to Synapses by Activity. Journal of Neuroscience, 2012, 32, 5398-5413.	3.6	47
104	Ca²⁺-Dependent, Phospholipid-Binding Residues of Synaptotagmin Are Critical for Excitationâ€“Secretion CouplingIn Vivo. Journal of Neuroscience, 2008, 28, 7458-7466.	3.6	44
105	Lipid Binding Ridge on Loops 2 and 3 of the C2A Domain of Synaptotagmin I as Revealed by NMR Spectroscopy. Journal of Biological Chemistry, 1998, 273, 25659-25663.	3.4	43
106	Molecular Regulation of Membrane Resealing in 3T3 Fibroblasts. Journal of Biological Chemistry, 2005, 280, 1652-1660.	3.4	43
107	Glycosylation Is Dispensable for Sorting of Synaptotagmin 1 but Is Critical for Targeting of SV2 and Synaptophysin to Recycling Synaptic Vesicles. Journal of Biological Chemistry, 2012, 287, 35658-35668.	3.4	43
108	Resolving kinetic intermediates during the regulated assembly and disassembly of fusion pores. Nature Communications, 2020, 11, 231.	12.8	43

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109	Regulation of Exocytosis and Fusion Pores by Synaptotagmin-Effector Interactions. Molecular Biology of the Cell, 2010, 21, 2821-2831.	2.1	42
110	Concurrent Binding of Complexin and Synaptotagmin to Liposome-Embedded SNARE Complexes. Biochemistry, 2009, 48, 657-659.	2.5	36
111	Crystal Structure of the Botulinum Neurotoxin Type G Binding Domain: Insight into Cell Surface Binding. Journal of Molecular Biology, 2010, 397, 1287-1297.	4.2	36
112	Lipid-anchored Synaptobrevin Provides Little or No Support for Exocytosis or Liposome Fusion. Journal of Biological Chemistry, 2016, 291, 2848-2857.	3.4	34
113	Sorting sub-150-nm liposomes of distinct sizes by DNA-brick-assisted centrifugation. Nature Chemistry, 2021, 13, 335-342.	13.6	34
114	The Transmembrane Domain of Syntaxin 1A Is Critical for Cytoplasmic Domain Protein-Protein Interactions. Journal of Biological Chemistry, 2001, 276, 15458-15465.	3.4	33
115	Acute disruption of the synaptic vesicle membrane protein synaptotagmin 1 using knockoff in mouse hippocampal neurons. ELife, 2020, 9, .	6.0	33
116	Syntaxin Requirement for Ca²⁺-Triggered Exocytosis in Neurons and Endocrine Cells Demonstrated with an Engineered Neurotoxin. Biochemistry, 2011, 50, 2711-2713.	2.5	32
117	GÎ²Î³ directly modulates vesicle fusion by competing with synaptotagmin for binding to neuronal SNARE proteins embedded in membranes. Journal of Biological Chemistry, 2017, 292, 12165-12177.	3.4	32
118	Pulse-Chase Proteomics of the App Knockin Mouse Models of Alzheimerâ€™s Disease Reveals that Synaptic Dysfunction Originates in Presynaptic Terminals. Cell Systems, 2021, 12, 141-158.e9.	6.2	32
119	Detection of Highly Curved Membrane Surfaces Using a Cyclic Peptide Derived from Synaptotagmin-I. ACS Chemical Biology, 2012, 7, 1629-1635.	3.4	31
120	The Krebs Cycle Enzyme Isocitrate Dehydrogenase 3A Couples Mitochondrial Metabolism to Synaptic Transmission. Cell Reports, 2017, 21, 3794-3806.	6.4	31
121	Rat and Drosophila Synaptotagmin 4 Have Opposite Effects during SNARE-catalyzed Membrane Fusion. Journal of Biological Chemistry, 2010, 285, 30759-30766.	3.4	30
122	The synaptotagmin C2B domain calcium-binding loops modulate the rate of fusion pore expansion. Molecular Biology of the Cell, 2018, 29, 834-845.	2.1	30
123	Phosphatidylinositol 4,5-bisphosphate drives Ca2+-independent membrane penetration by the tandem C2 domain proteins synaptotagmin-1 and Doc2Î². Journal of Biological Chemistry, 2019, 294, 10942-10953.	3.4	30
124	Synaptotagmin isoforms confer distinct activation kinetics and dynamics to chromaffin cell granules. Journal of General Physiology, 2017, 149, 763-780.	1.9	29
125	Increased expression of AT-1/SLC33A1 causes an autistic-like phenotype in mice by affecting dendritic branching and spine formation. Journal of Experimental Medicine, 2016, 213, 1267-1284.	8.5	27
126	Functional analysis of the interface between the tandem C2 domains of synaptotagmin-1. Molecular Biology of the Cell, 2016, 27, 979-989.	2.1	27

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127	Beyond Amphiphilic Balance: Changing Subunit Stereochemistry Alters the Pore-Forming Activity of Nylon-3 Polymers. Journal of the American Chemical Society, 2021, 143, 3219-3230.	13.7	27
128	Synaptotagmin 17 controls neurite outgrowth and synaptic physiology via distinct cellular pathways. Nature Communications, 2019, 10, 3532.	12.8	26
129	Atomic Force Microscope Spectroscopy Reveals a Hemifusion Intermediate during Soluble N-Ethylmaleimide-Sensitive Factor-Attachment Protein Receptors-Mediated Membrane Fusion. Biophysical Journal, 2008, 94, 648-655.	0.5	25
130	Synaptotagmin Perturbs the Structure of Phospholipid Bilayers. Biochemistry, 2008, 47, 2143-2152.	2.5	24
131	Pathogenic TFG Mutations Underlying Hereditary Spastic Paraplegia Impair Secretory Protein Trafficking and Axon Fasciculation. Cell Reports, 2018, 24, 2248-2260.	6.4	24
132	Synaptotagmin 7 is targeted to the axonal plasma membrane through Î³-secretase processing to promote synaptic vesicle docking in mouse hippocampal neurons. ELife, 2021, 10, .	6.0	24
133	Botulinum Neurotoxins B and E Translocate at Different Rates and Exhibit Divergent Responses to GT1b and Low pH. Biochemistry, 2012, 51, 5655-5662.	2.5	23
134	Synaptic vesicle fusion: today and beyond. Nature Structural and Molecular Biology, 2019, 26, 663-668.	8.2	23
135	Sex-specific regulation of follicle-stimulating hormone secretion by synaptotagmin 9. Nature Communications, 2015, 6, 8645.	12.8	21
136	Doc2-mediated superpriming supports synaptic augmentation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E5605-E5613.	7.1	21
137	Programmable Nanodisc Patterning by DNA Origami. Nano Letters, 2020, 20, 6032-6037.	9.1	21
138	All three components of the neuronal SNARE complex contribute to secretory vesicle docking. Journal of Cell Biology, 2012, 198, 323-330.	5.2	20
139	An Engineered Metal Sensor Tunes the Kinetics of Synaptic Transmission. Journal of Neuroscience, 2015, 35, 11769-11779.	3.6	20
140	Permeation of Styryl Dyes through Nanometer-Scale Pores in Membranes. Biochemistry, 2011, 50, 7493-7502.	2.5	19
141	Multivalency amplifies the selection and affinity of bradykinin-derived peptides for lipid nanovesicles. Molecular BioSystems, 2013, 9, 2005.	2.9	19
142	Mutations that disrupt Ca²⁺-binding activity endow Doc2Î² with novel functional properties during synaptic transmission. Molecular Biology of the Cell, 2014, 25, 481-494.	2.1	19
143	Synaptotagmin 1 oligomerization via the juxtamembrane linker regulates spontaneous and evoked neurotransmitter release. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	19
144	Pulling force generated by interacting SNAREs facilitates membrane hemifusion. Integrative Biology (United Kingdom), 2009, 1, 301.	1.3	18

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145	A Ca 2+ Sensor for Exocytosis. Trends in Neurosciences, 2018, 41, 327-330.	8.6	18
146	ENaC subunit-subunit interactions and inhibition by syntaxin 1A. American Journal of Physiology - Renal Physiology, 2004, 286, F1100-F1106.	2.7	16
147	Structural elements that underlie Doc2Î² function during asynchronous synaptic transmission. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4316-25.	7.1	16
148	Rapid and Gentle Immunopurification of Brain Synaptic Vesicles. Journal of Neuroscience, 2022, 42, 3512-3522.	3.6	16
149	Structural Basis for the Distinct Membrane Binding Activity of the Homologous C2A Domains of Myoferlin and Dysferlin. Journal of Molecular Biology, 2019, 431, 2112-2126.	4.2	15
150	Cholesterol stabilizes recombinant exocytic fusion pores by altering membrane bending rigidity. Biophysical Journal, 2021, 120, 1367-1377.	0.5	15
151	The complexin C-terminal amphipathic helix stabilizes the fusion pore open state by sculpting membranes. Nature Structural and Molecular Biology, 2022, 29, 97-107.	8.2	15
152	Retargeted Clostridial Neurotoxins as Novel Agents for Treating Chronic Diseases. Biochemistry, 2011, 50, 10419-10421.	2.5	14
153	â€œSelfâ€•versus â€œNon-Selfâ€•Connectivity Dictates Properties of Synaptic Transmission and Plasticity. PLoS ONE, 2013, 8, e62414.	2.5	14
154	Activation of Postsynaptic Ca2+ Stores Modulates Glutamate Receptor Cycling in Hippocampal Neurons. Journal of Neurophysiology, 2005, 93, 178-188.	1.8	13
155	3 Tetanus and botulinal neurotoxins tools to understand exocytosis in neurons. Advances in Second Messenger and Phosphoprotein Research, 1994, 29, 47-58.	4.5	11
156	Expression of cDNAs encoding wild-type and mutant neuromodulins in Escherichia coli: comparison with the native protein from bovine brain. Biochemistry, 1989, 28, 8142-8148.	2.5	10
157	Chapter 4: Mutagenesis of the calmodulin binding domain of neuromodulin. Progress in Brain Research, 1991, 89, 37-44.	1.4	9
158	Inappropriate Intrusion of an Axonal Mitochondrial Anchor into Dendrites Causes Neurodegeneration. Cell Reports, 2019, 29, 685-696.e5.	6.4	9
159	Allâ€optical monitoring of excitationâ€“secretion coupling demonstrates that SV2A functions downstream of evoked Ca²⁺ entry. Journal of Physiology, 2022, 600, 645-654.	2.9	8
160	Effects of synaptotagmin reveal two distinct mechanisms of agonist-stimulated internalization of the M4 muscarinic acetylcholine receptor. British Journal of Pharmacology, 2005, 144, 761-771.	5.4	6
161	[9] Application of fluorescent probes to study mechanics and dynamics of Ca2+-triggered synaptotagmin C2 domain-membrane interactions. Methods in Enzymology, 2003, 360, 238-258.	1.0	5
162	VAMP2 and synaptotagmin mobility in chromaffin granule membranes: implications for regulated exocytosis. Molecular Biology of the Cell, 2022, 33, mbcE21100494.	2.1	4

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163	On the trail of the Ca2+ receptor(s) for exocytosis. Seminars in Neuroscience, 1994, 6, 159-165.	2.2	2
164	Microscopy Using Fluorescent Drug Biosensors for â€œInside-Out Pharmacologyâ€• Biophysical Journal, 2018, 114, 358a.	0.5	2
165	Ca2+ and synaptotagmin VIIâ€“dependent delivery of lysosomal membrane to nascent phagosomes. Journal of Experimental Medicine, 2006, 203, i26-i26.	8.5	0
166	Otoferlin is a calcium sensor that directly regulates SNARE-mediated membrane fusion. Journal of General Physiology, 2010, 136, i4-i4.	1.9	0
167	All three components of the neuronal SNARE complex contribute to secretory vesicle docking. Journal of General Physiology, 2012, 140, i2-i2.	1.9	0
168	Pathogenic TFG Mutations Underlying Hereditary Spastic Paraplegia Impair Secretory Protein Trafficking and Axon Fasciculation. SSRN Electronic Journal, 0, , .	0.4	0
169	Knockoff: Druggable Cleavage of Membrane Proteins. Bio-protocol, 2021, 11, e4224.	0.4	0