Thomas Binz

List of Publications by Year
in descending order

61 papers	6,412 citations	94433 37 h-index	133252 59 g-index
63 all docs	63 docs citations	63 times ranked	3286 citing authors

#	Article	IF	Citations
1	Detection of VAMP Proteolysis by Tetanus and Botulinum Neurotoxin Type B In Vivo with a Cleavage-Specific Antibody. International Journal of Molecular Sciences, 2022, 23, 4355.	4.1	6
2	Ability of human SNAP-23 to generate high molecular weight SDS-resistant ternary SNARE complexes is influenced by C-terminal coil content. Biochemistry and Biophysics Reports, 2021, 28, 101150.	1.3	0
3	Role of the Sec22bâ€"E-Syt complex in neurite growth and ramification. Journal of Cell Science, 2020, 133, .	2.0	26
4	Engineering an Effective Human SNAP-23 Cleaving Botulinum Neurotoxin A Variant. Toxins, 2020, 12, 804.	3.4	3
5	Duplication of clostridial binding domains for enhanced macromolecular delivery into neurons. Toxicon: X, 2020, 5, 100019.	2.9	0
6	Structural and biochemical characterization of the protease domain of the mosaic botulinum neurotoxin type HA. Pathogens and Disease, 2018, 76, .	2.0	12
7	Botulinum Neurotoxin F Subtypes Cleaving the VAMP-2 Q58â€"K59 Peptide Bond Exhibit Unique Catalytic Properties and Substrate Specificities. Toxins, 2018, 10, 311.	3.4	6
8	Hsp90 is involved in the entry of clostridial neurotoxins into the cytosol of nerve terminals. Cellular Microbiology, 2017, 19, e12647.	2.1	39
9	A Cell Line for Detection of Botulinum Neurotoxin Type B. Frontiers in Pharmacology, 2017, 8, 796.	3.5	21
10	Botulinum neurotoxin C mutants reveal different effects of syntaxin or SNAP-25 proteolysis on neuromuscular transmission. PLoS Pathogens, 2017, 13, e1006567.	4.7	27
11	The first non Clostridial botulinum-like toxin cleaves VAMP within the juxtamembrane domain. Scientific Reports, 2016, 6, 30257.	3.3	84
12	Identification and Characterization of Botulinum Neurotoxin A Substrate Binding Pockets and Their Re-Engineering for Human SNAP-23. Journal of Molecular Biology, 2016, 428, 372-384.	4.2	28
13	Botulinum neurotoxin type C protease induces apoptosis in differentiated human neuroblastoma cells. Oncotarget, 2016, 7, 33220-33228.	1.8	22
14	A Novel Inhibitor Prevents the Peripheral Neuroparalysis of Botulinum Neurotoxins. Scientific Reports, 2015, 5, 17513.	3.3	29
15	The thioredoxin reductase â€" Thioredoxin redox system cleaves the interchain disulphide bond of botulinum neurotoxins on the cytosolic surface of synaptic vesicles. Toxicon, 2015, 107, 32-36.	1.6	26
16	Inhibition of botulinum neurotoxins interchain disulfide bond reduction prevents the peripheral neuroparalysis of botulism. Biochemical Pharmacology, 2015, 98, 522-530.	4.4	33
17	Thioredoxin and Its Reductase Are Present on Synaptic Vesicles, and Their Inhibition Prevents the Paralysis Induced by Botulinum Neurotoxins. Cell Reports, 2014, 8, 1870-1878.	6.4	90
18	Identification of the synaptic vesicle glycoprotein 2 receptor binding site in botulinum neurotoxin A. FEBS Letters, 2014, 588, 1087-1093.	2.8	40

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19	Botulinum proteaseâ€cleaved SNARE fragments induce cytotoxicity in neuroblastoma cells. Journal of Neurochemistry, 2014, 129, 781-791.	3.9	14
20	The thioredoxin reductaseâ€thioredoxin system is involved in the entry of tetanus and botulinum neurotoxins in the cytosol of nerve terminals. FEBS Letters, 2013, 587, 150-155.	2.8	55
21	Neutralisation of specific surface carboxylates speeds up translocation of botulinum neurotoxin type B enzymatic domain. FEBS Letters, 2013, 587, 3831-3836.	2.8	33
22	Exchanging the minimal cell binding fragments of tetanus neurotoxin in botulinum neurotoxin A and B impacts their toxicity at the neuromuscular junction and central neurons. Toxicon, 2013, 75, 108-121.	1.6	8
23	Time course and temperature dependence of the membrane translocation of tetanus and botulinum neurotoxins C and D in neurons. Biochemical and Biophysical Research Communications, 2013, 430, 38-42.	2.1	30
24	Botulinum Neurotoxin G Binds Synaptotagmin-II in a Mode Similar to That of Serotype B: Tyrosine 1186 and Lysine 1191 Cause Its Lower Affinity. Biochemistry, 2013, 52, 3930-3938.	2.5	21
25	Identification of the SV2 protein receptor-binding site of botulinum neurotoxin typeÂE. Biochemical Journal, 2013, 453, 37-47.	3.7	43
26	Human synaptotagminâ€II is not a high affinity receptor for botulinum neurotoxin B and G: Increased therapeutic dosage and immunogenicity. FEBS Letters, 2012, 586, 310-313.	2.8	72
27	Clostridial Neurotoxin Light Chains: Devices for SNARE Cleavage Mediated Blockade of Neurotransmission. Current Topics in Microbiology and Immunology, 2012, 364, 139-157.	1.1	52
28	Clostridial Neurotoxin Light Chains: Devices for SNARE Cleavage Mediated Blockade of Neurotransmission. Current Topics in Microbiology and Immunology, 2012, , 139-157.	1.1	5
29	The biological activity of botulinum neurotoxin type C is dependent upon novel types of ganglioside binding sites. Molecular Microbiology, 2011, 81, 143-156.	2.5	64
30	Exchange of the H_{CC} domain mediating double receptor recognition improves the pharmacodynamic properties of botulinum neurotoxin. FEBS Journal, 2011, 278, 4506-4515.	4.7	32
31	P2X7 Receptors Trigger ATP Exocytosis and Modify Secretory Vesicle Dynamics in Neuroblastoma Cells. Journal of Biological Chemistry, 2011, 286, 11370-11381.	3.4	48
32	Clostridial Neurotoxins: Mechanism of SNARE Cleavage and Outlook on Potential Substrate Specificity Reengineering. Toxins, 2010, 2, 665-682.	3.4	59
33	Botulinum neurotoxin serotype D attacks neurons via two carbohydrate-binding sites in a ganglioside-dependent manner. Biochemical Journal, 2010, 431, 207-216.	3.7	71
34	SNARE tagging allows stepwise assembly of a multimodular medicinal toxin. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18197-18201.	7.1	47
35	Cell entry strategy of clostridial neurotoxins. Journal of Neurochemistry, 2009, 109, 1584-1595.	3.9	175
36	Botulinum neurotoxins C, E and F bind gangliosides via a conserved binding site prior to stimulationâ€dependent uptake with botulinum neurotoxin F utilising the three isoforms of SV2 as second receptor. Journal of Neurochemistry, 2009, 110, 1942-1954.	3.9	146

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37	Substrate Recognition Mechanism of VAMP/Synaptobrevin-cleaving Clostridial Neurotoxins. Journal of Biological Chemistry, 2008, 283, 21145-21152.	3.4	52
38	Identification of the protein receptor binding site of botulinum neurotoxins B and G proves the double-receptor concept. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 359-364.	7.1	169
39	Structural and Biochemical Studies of Botulinum Neurotoxin Serotype C1 Light Chain Protease:â€‰ Implications for Dual Substrate Specificity[,]. Biochemistry, 2007, 46, 10685-10693.	2.5	46
40	The synaptic vesicle protein 2C mediates the uptake of botulinum neurotoxin A into phrenic nerves. FEBS Letters, 2006, 580, 2011-2014.	2.8	285
41	Identification of the Amino Acid Residues Rendering TI-VAMP Insensitive toward Botulinum Neurotoxin B. Journal of Molecular Biology, 2006, 357, 574-582.	4.2	25
42	Botulinum neurotoxin B recognizes its protein receptor with high affinity and specificity. Nature, 2006, 444, 1092-1095.	27.8	219
43	Analysis of Active Site Residues of Botulinum Neurotoxin E by Mutational, Functional, and Structural Studies:â€‰ Glu335Gln Is an Apoenzyme. Biochemistry, 2005, 44, 8291-8302.	2.5	36
44	Structural Analysis of Botulinum Neurotoxin Serotype F Light Chain:â€‰ Implications on Substrate Binding and Inhibitor Design. Biochemistry, 2005, 44, 11758-11765.	2.5	64
45	Beyond BOTOX: advantages and limitations of individual botulinum neurotoxins. Trends in Neurosciences, 2005, 28, 446-452.	8.6	113
46	Structural analysis of the catalytic domain of tetanus neurotoxin. Toxicon, 2005, 45, 929-939.	1.6	42
47	Synaptotagmins I and II Act as Nerve Cell Receptors for Botulinum Neurotoxin G. Journal of Biological Chemistry, 2004, 279, 30865-30870.	3.4	220
48	Botulinum neurotoxin type D enables cytosolic delivery of enzymatically active cargo proteins to neurones via unfolded translocation intermediates. Journal of Neurochemistry, 2004, 91, 1461-1472.	3.9	95
49	Structural Analysis of Botulinum Neurotoxin Type E Catalytic Domain and Its Mutant Glu212â†'Gln Reveals the Pivotal Role of the Glu212 Carboxylate in the Catalytic Pathwayâ€,â€¡. Biochemistry, 2004, 43, 6637-6644.	2.5	82
50	Regulation of Releasable Vesicle Pool Sizes by Protein Kinase A-Dependent Phosphorylation of SNAP-25. Neuron, 2004, 41, 417-429.	8.1	204
51	The HCC-domain of botulinum neurotoxins A and B exhibits a singular ganglioside binding site displaying serotype specific carbohydrate interaction. Molecular Microbiology, 2003, 51, 631-643.	2.5	205
52	Two Carbohydrate Binding Sites in the HCC-domain of Tetanus Neurotoxin are Required for Toxicity. Journal of Molecular Biology, 2003, 326, 835-847.	4.2	127
53	Arg362and Tyr365of the Botulinum Neurotoxin Type A Light Chain Are Involved in Transition State Stabilizationâ€. Biochemistry, 2002, 41, 1717-1723.	2.5	104
54	The SNARE protein SNAP-25 is linked to fast calcium triggering of exocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1627-1632.	7.1	156

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55	Protein Kinase C-Dependent Phosphorylation of Synaptosome-Associated Protein of 25 kDa at Ser¹⁸⁷Potentiates Vesicle Recruitment. Journal of Neuroscience, 2002, 22, 9278-9286.	3.6	167
56	Probing the Mechanistic Role of Glutamate Residue in the Zinc-Binding Motif of Type A Botulinum Neurotoxin Light Chainâ€. Biochemistry, 2000, 39, 2399-2405.	2.5	84
57	Proteolysis of SNAPâ€25 Isoforms by Botulinum Neurotoxin Types A, C, and E. Journal of Neurochemistry, 1999, 72, 327-337.	3.9	186
58	Multiple kinetic components of exocytosis distinguished by neurotoxin sensitivity. Nature Neuroscience, 1998, 1, 192-200.	14.8	313
59	Cellubrevin is a ubiquitous tetanus-toxin substrate homologous to a putative synaptic vesicle fusion protein. Nature, 1993, 364, 346-349.	27.8	489
60	Botulinum neurotoxin A selectively cleaves the synaptic protein SNAP-25. Nature, 1993, 365, 160-163.	27.8	1,145
61	Tetanus toxin action: Inhibition of neurotransmitter release linked to synaptobrevin proteolysis. Biochemical and Biophysical Research Communications, 1992, 189, 1017-1023.	2.1	316