Volker Herzig

List of Publications by Year
in descending order

85 papers	3,485 citations	136950 32 h-index	149698 56 g-index
93 all docs	93 docs citations	93 times ranked	2828 citing authors

#	Article	IF	Citations
1	Spider-Venom Peptides as Therapeutics. Toxins, 2010, 2, 2851-2871.	3.4	251
2	Selective spider toxins reveal a role for the Nav1.1 channel in mechanical pain. Nature, 2016, 534, 494-499.	27.8	239
3	Spider-venom peptides that target voltage-gated sodium channels: Pharmacological tools and potential therapeutic leads. Toxicon, 2012, 60, 478-491.	1.6	202
4	Spider-Venom Peptides as Bioinsecticides. Toxins, 2012, 4, 191-227.	3.4	190
5	ArachnoServer 2.0, an updated online resource for spider toxin sequences and structures. Nucleic Acids Research, 2011, 39, D653-D657.	14.5	159
6	Pharmacological characterisation of the highly NaV1.7 selective spider venom peptide Pn3a. Scientific Reports, 2017, 7, 40883.	3.3	120
7	The insecticidal potential of venom peptides. Cellular and Molecular Life Sciences, 2013, 70, 3665-3693.	5.4	110
8	Selective Na _V 1.1 activation rescues Dravet syndrome mice from seizures and premature death. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8077-E8085.	7.1	105
9	Effects of MPEP on locomotion, sensitization and conditioned reward induced by cocaine or morphine. Neuropharmacology, 2004, 47, 973-984.	4.1	98
10	Animal toxins â€" Natureâ€™s evolutionary-refined toolkit for basic research and drug discovery. Biochemical Pharmacology, 2020, 181, 114096.	4.4	97
11	The Cystine Knot Is Responsible for the Exceptional Stability of the Insecticidal Spider Toxin Ï‰-Hexatoxin-Hv1a. Toxins, 2015, 7, 4366-4380.	3.4	86
12	ArachnoServer 3.0: an online resource for automated discovery, analysis and annotation of spider toxins. Bioinformatics, 2018, 34, 1074-1076.	4.1	86
13	Seven novel modulators of the analgesic target <scp>Na_V</scp>1.7 uncovered using a highâ€throughput venomâ€based discovery approach. British Journal of Pharmacology, 2015, 172, 2445-2458.	5.4	74
14	Identification and Characterization of ProTx-III [<i>Î¼</i>-TRTX-Tp1a], a New Voltage-Gated Sodium Channel Inhibitor from Venom of the Tarantula <i>Thrixopelma pruriens</i>. Molecular Pharmacology, 2015, 88, 291-303.	2.3	72
15	A Cell-Penetrating Scorpion Toxin Enables Mode-Specific Modulation of TRPA1 and Pain. Cell, 2019, 178, 1362-1374.e16.	28.9	72
16	A Proteomics and Transcriptomics Investigation of the Venom from the Barychelid Spider Trittame loki (Brush-Foot Trapdoor). Toxins, 2013, 5, 2488-2503.	3.4	68
17	The assassin bug Pristhesancus plagipennis produces two distinct venoms in separate gland lumens. Nature Communications, 2018, 9, 755.	12.8	67
18	Weaponization of a Hormone: Convergent Recruitment of Hyperglycemic Hormone into the Venom of Arthropod Predators. Structure, 2015, 23, 1283-1292.	3.3	66

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19	Repeated treatment with the NMDA antagonist MK-801 disrupts reconsolidation of memory for amphetamine-conditioned place preference. Behavioural Pharmacology, 2007, 18, 699-703.	1.7	63
20	A distinct sodium channel voltage-sensor locus determines insect selectivity of the spider toxin Dc1a. Nature Communications, 2014, 5, 4350.	12.8	63
21	Effects of MPEP on expression of food-, MDMA- or amphetamine-conditioned place preference in rats. Addiction Biology, 2005, 10, 243-249.	2.6	60
22	Versatile spider venom peptides and their medical and agricultural applications. Toxicon, 2019, 158, 109-126.	1.6	59
23	Structural venomics reveals evolution of a complex venom by duplication and diversification of an ancient peptide-encoding gene. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11399-11408.	7.1	59
24	ArachnoServer: a database of protein toxins from spiders. BMC Genomics, 2009, 10, 375.	2.8	58
25	Dangerous arachnidsâ€"Fake news or reality?. Toxicon, 2017, 138, 173-183.	1.6	58
26	Modulatory features of the novel spider toxin Î¼â€TRTXâ€Df1a isolated from the venom of the spider <i>Davus fasciatus</i>. British Journal of Pharmacology, 2017, 174, 2528-2544.	5.4	46
27	Intersexual variations in the venom of the Brazilian â€˜armedâ€™ spider Phoneutria nigriventer (Keyserling,) Tj ETQq1 1 0.784314 rgBT /	1.6	42
28	The biology and evolution of spider venoms. Biological Reviews, 2022, 97, 163-178.	10.4	42
29	Intersexual variations in Northern (Missulena pruinosa) and Eastern (M. bradleyi) mouse spider venom. Toxicon, 2008, 51, 1167-1177.	1.6	41
30	Dipteran toxicity assays for determining the oral insecticidal activity of venoms and toxins. Toxicon, 2018, 150, 297-303.	1.6	39
31	Intersexual variations in the pharmacological properties of Coremiocnemis tropix (Araneae,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	1.6	38
32	The insecticidal spider toxin <scp>SFI</scp>1 is a knottin peptide that blocks the pore of insect voltageâ€gated sodium channels via a large Î²â€hairpin loop. FEBS Journal, 2015, 282, 904-920.	4.7	34
33	The insecticidal neurotoxin Aps III is an atypical knottin peptide that potently blocks insect voltage-gated sodium channels. Biochemical Pharmacology, 2013, 85, 1542-1554.	4.4	33
34	Australian funnel-web spiders evolved human-lethal Î´-hexatoxins for defense against vertebrate predators. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24920-24928.	7.1	32
35	Ontogenetic changes in Phoneutria nigriventer (Araneae, Ctenidae) spider venom. Toxicon, 2004, 44, 635-640.	1.6	29
36	Neurotoxic and insecticidal properties of venom from the Australian theraphosid spider Selenotholus foelschei. NeuroToxicology, 2008, 29, 471-475.	3.0	28

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37	A spider-venom peptide with multitarget activity on sodium and calcium channels alleviates chronic visceral pain in a model of irritable bowel syndrome. Pain, 2021, 162, 569-581.	4.2	28
38	Molecular basis of the remarkable species selectivity of an insecticidal sodium channel toxin from the African spider Augacephalus ezendami. Scientific Reports, 2016, 6, 29538.	3.3	25
39	Discovery and mode of action of a novel analgesic Î²-toxin from the African spider Ceratogyrus darlingi. PLoS ONE, 2017, 12, e0182848.	2.5	22
40	Isolation and characterization of a structurally unique Î²-hairpin venom peptide from the predatory ant Anochetus emarginatus. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 2553-2562.	2.4	21
41	The emerging field of venom-microbiomics for exploring venom as a microenvironment, and the corresponding Initiative for Venom Associated Microbes and Parasites (iVAMP). Toxicon: X, 2019, 4, 100016.	2.9	21
42	Arthropod assassins: Crawling biochemists with diverse toxin pharmacopeias. Toxicon, 2019, 158, 33-37.	1.6	21
43	A selective NaV1.1 activator with potential for treatment of Dravet syndrome epilepsy. Biochemical Pharmacology, 2020, 181, 113991.	4.4	19
44	Insecticidal activity of a recombinant knottin peptide from <i>Loxosceles intermedia</i> venom and recognition of these peptides as a conserved family in the genus. Insect Molecular Biology, 2017, 26, 25-34.	2.0	17
45	Can we resolve the taxonomic bias in spider venom research?. Toxicon: X, 2019, 1, 100005.	2.9	17
46	Do Vicinal Disulfide Bridges Mediate Functionally Important Redox Transformations in Proteins?. Antioxidants and Redox Signaling, 2013, 19, 1976-1980.	5.4	16
47	Rapid ligand fishing for identification of acetylcholinesterase-binding peptides in snake venom reveals new properties of dendrotoxins. Toxicon, 2018, 152, 1-8.	1.6	16
48	Methods for Deployment of Spider Venom Peptides as Bioinsecticides. Advances in Insect Physiology, 2014, , 389-411.	2.7	15
49	Isolation of two insecticidal toxins from venom of the Australian theraphosid spider Coremiocnemis tropix. Toxicon, 2016, 123, 62-70.	1.6	14
50	Venom Peptides with Dual Modulatory Activity on the Voltage-Gated Sodium Channel Na_V1.1 Provide Novel Leads for Development of Antiepileptic Drugs. ACS Pharmacology and Translational Science, 2020, 3, 119-134.	4.9	14
51	Ontogenesis, gender, and molting influence the venom yield in the spider Coremiocnemis tropix (Araneae, Theraphosidae). Journal of Venom Research, 2010, 1, 76-83.	0.6	14
52	Novel venom-derived inhibitors of the human EAG channel, a putative antiepileptic drug target. Biochemical Pharmacology, 2018, 158, 60-72.	4.4	13
53	Buzz Kill: Function and Proteomic Composition of Venom from the Giant Assassin Fly Dolopus genitalis (Diptera: Asilidae). Toxins, 2018, 10, 456.	3.4	12
54	The antitrypanosomal diarylamidines, diminazene and pentamidine, show anthelmintic activity against Haemonchus contortus in vitro. Veterinary Parasitology, 2019, 270, 40-46.	1.8	12

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55	It Takes Two: Dimerization Is Essential for the Broad-Spectrum Predatory and Defensive Activities of the Venom Peptide Mp1a from the Jack Jumper Ant Myrmecia pilosula. Biomedicines, 2020, 8, 185.	3.2	12
56	Chapter 8. Therapeutic Applications ofÂSpider-Venom Peptides. RSC Drug Discovery Series, 2015, , 221-244.	0.3	11
57	Insect-Active Toxins with Promiscuous Pharmacology from the African Theraphosid Spider Monocentropus balfouri. Toxins, 2017, 9, 155.	3.4	10
58	Development of High-Throughput Fluorescent-Based Screens to Accelerate Discovery of P2X Inhibitors from Animal Venoms. Journal of Natural Products, 2019, 82, 2559-2567.	3.0	10
59	Pharmacological Inhibition of the Voltage-Gated Sodium Channel NaV1.7 Alleviates Chronic Visceral Pain in a Rodent Model of Irritable Bowel Syndrome. ACS Pharmacology and Translational Science, 2021, 4, 1362-1378.	4.9	10
60	Multipurpose peptides: The venoms of Amazonian stinging ants contain anthelmintic ponericins with diverse predatory and defensive activities. Biochemical Pharmacology, 2021, 192, 114693.	4.4	10
61	Anti-craving drugs acamprosate and naloxone do not reduce expression of morphine conditioned place preference in isolated and group-housed rats. Neuroscience Letters, 2005, 374, 119-123.	2.1	9
62	Repeated-testing of place preference expression for evaluation of anti-craving-drug effects. Amino Acids, 2005, 28, 309-317.	2.7	8
63	Periplasmic Expression of 4/7 Î±-Conotoxin TxIA Analogs in E. coli Favors Ribbon Isomer Formation â€" Suggestion of a Binding Mode at the Î±7 nAChR. Frontiers in Pharmacology, 2019, 10, 577.	3.5	8
64	Heterodimeric Insecticidal Peptide Provides New Insights into the Molecular and Functional Diversity of Ant Venoms. ACS Pharmacology and Translational Science, 2020, 3, 1211-1224.	4.9	8
65	Love bites â€" Do venomous arachnids make safe pets?. Toxicon, 2021, 190, 65-72.	1.6	8
66	Evaluation of Chemical Strategies for Improving the Stability and Oral Toxicity of Insecticidal Peptides. Biomedicines, 2018, 6, 90.	3.2	7
67	Venom of the Red-Bellied Black Snake Pseudechis porphyriacus Shows Immunosuppressive Potential. Toxins, 2020, 12, 674.	3.4	7
68	Mutational analysis of ProTx-I and the novel venom peptide Pe1b provide insight into residues responsible for selective inhibition of the analgesic drug target NaV1.7. Biochemical Pharmacology, 2020, 181, 114080.	4.4	7
69	Animal Venomsâ€"Curse or Cure?. Biomedicines, 2021, 9, 413.	3.2	7
70	Multitarget nociceptor sensitization by a promiscuous peptide from the venom of the King Baboon spider. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	7
71	Characterization of Three Venom Peptides from the Spitting Spider Scytodes thoracica. PLoS ONE, 2016, 11, e0156291.	2.5	6
72	Venom from the spider Araneus ventricosus is lethal to insects but inactive in vertebrates. Toxicon, 2016, 115, 63-69.	1.6	6

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73	Addition of K22 Converts Spider Venom Peptide Pme2a from an Activator to an Inhibitor of NaV1.7. Biomedicines, 2020, 8, 37.	3.2	6
74	Amygdala cannulation alters expression of cocaine conditioned place preference and locomotion in rats. Addiction Biology, 2007, 12, 478-481.	2.6	5
75	Towards a generic prototyping approach for therapeutically-relevant peptides and proteins in a cell-free translation system. Nature Communications, 2022, 13, 260.	12.8	5
76	The Tarantula Venom Peptide Eo1a Binds to the Domain II S3-S4 Extracellular Loop of Voltage-Gated Sodium Channel NaV1.8 to Enhance Activation. Frontiers in Pharmacology, 2021, 12, 789570.	3.5	4
77	Muscle spasms â€“ A common symptom following theraphosid spider bites?. Toxicon, 2021, 192, 74-77.	1.6	3
78	The Neurotoxic Mode of Action of Venoms from the Spider Family Theraphosidae. , 2013, , 203-215.		2
79	The Tarantula Toxin Ï‰-Avsp1a Specifically Inhibits Human CaV3.1 and CaV3.3 via the Extracellular S3-S4 Loop of the Domain 1 Voltage-Sensor. Biomedicines, 2022, 10, 1066.	3.2	2
80	Create Guidelines for Characterization of Venom Peptides. Toxins, 2016, 8, 252.	3.4	1
81	Discovery and characterisation of novel peptides from Amazonian stinging ant venoms with antiparasitic activity. Toxicon, 2020, 177, S60.	1.6	1
82	32. Development of High Throughput Calcium ChannelÂAssays to Accelerate the Discovery of NovelÂToxins Targeting Human Cav2.2 Channels. Toxicon, 2012, 60, 111.	1.6	0
83	Novel Human Eag Channel Antagonists from Spider Venoms. Biophysical Journal, 2017, 112, 332a.	0.5	0
84	TTX, cations and spider venom modify avian muscle tone in vitro. Journal of Venom Research, 2011, 2, 1-5.	0.6	0
85	Analysis of intraspecific variation in venoms of Acanthophis antarcticus death adders from South Australia. Journal of Venom Research, 2013, 4, 13-20.	0.6	0