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	The biology and evolution of spider venoms. Biological Reviews, 2022, 97, 163-178.	10.4	42
2	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
3	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
4	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
5	Love bites â€“ Do venomous arachnids make safe pets?. Toxicon, 2021, 190, 65-72.	1.6	8
6	Muscle spasms â€“ A common symptom following theraphosid spider bites?. Toxicon, 2021, 192, 74-77.	1.6	3
7	Animal Venomsâ€”Curse or Cure?. Biomedicines, 2021, 9, 413.	3.2	7
8	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
9	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
10	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
11	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
12	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
13	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
14	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
15	Venom of the Red-Bellied Black Snake Pseudechis porphyriacus Shows Immunosuppressive Potential. Toxins, 2020, 12, 674.	3.4	7
16	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
17	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
18	Animal toxins â€” Natureâ€™s evolutionary-refined toolkit for basic research and drug discovery. Biochemical Pharmacology, 2020, 181, 114096.	4.4	97

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19	Addition of K22 Converts Spider Venom Peptide Pme2a from an Activator to an Inhibitor of NaV1.7. Biomedicines, 2020, 8, 37.	3.2	6
20	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
21	Discovery and characterisation of novel peptides from Amazonian stinging ant venoms with antiparasitic activity. Toxicon, 2020, 177, S60.	1.6	1
22	A selective NaV1.1 activator with potential for treatment of Dravet syndrome epilepsy. Biochemical Pharmacology, 2020, 181, 113991.	4.4	19
23	A Cell-Penetrating Scorpion Toxin Enables Mode-Specific Modulation of TRPA1 and Pain. Cell, 2019, 178, 1362-1374.e16.	28.9	72
24	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
25	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
26	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
27	The antitrypanosomal diarylamidines, diminazene and pentamidine, show anthelmintic activity against Haemonchus contortus in vitro. Veterinary Parasitology, 2019, 270, 40-46.	1.8	12
28	Can we resolve the taxonomic bias in spider venom research?. Toxicon: X, 2019, 1, 100005.	2.9	17
29	Versatile spider venom peptides and their medical and agricultural applications. Toxicon, 2019, 158, 109-126.	1.6	59
30	Arthropod assassins: Crawling biochemists with diverse toxin pharmacopeias. Toxicon, 2019, 158, 33-37.	1.6	21
31	The assassin bug Pristhesancus plagipennis produces two distinct venoms in separate gland lumens. Nature Communications, 2018, 9, 755.	12.8	67
32	ArachnoServer 3.0: an online resource for automated discovery, analysis and annotation of spider toxins. Bioinformatics, 2018, 34, 1074-1076.	4.1	86
33	Buzz Kill: Function and Proteomic Composition of Venom from the Giant Assassin Fly Dolopus genitalis (Diptera: Asilidae). Toxins, 2018, 10, 456.	3.4	12
34	Evaluation of Chemical Strategies for Improving the Stability and Oral Toxicity of Insecticidal Peptides. Biomedicines, 2018, 6, 90.	3.2	7
35	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
36	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

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37	Novel venom-derived inhibitors of the human EAG channel, a putative antiepileptic drug target. Biochemical Pharmacology, 2018, 158, 60-72.	4.4	13
38	Dipteran toxicity assays for determining the oral insecticidal activity of venoms and toxins. Toxicon, 2018, 150, 297-303.	1.6	39
39	Pharmacological characterisation of the highly NaV1.7 selective spider venom peptide Pn3a. Scientific Reports, 2017, 7, 40883.	3.3	120
40	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
41	Novel Human Eag Channel Antagonists from Spider Venoms. Biophysical Journal, 2017, 112, 332a.	0.5	0
42	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
43	Insect-Active Toxins with Promiscuous Pharmacology from the African Theraphosid Spider Monocentropus balfouri. Toxins, 2017, 9, 155.	3.4	10
44	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
45	Dangerous arachnidsâ€”Fake news or reality?. Toxicon, 2017, 138, 173-183.	1.6	58
46	Create Guidelines for Characterization of Venom Peptides. Toxins, 2016, 8, 252.	3.4	1
47	Characterization of Three Venom Peptides from the Spitting Spider Scytodes thoracica. PLoS ONE, 2016, 11, e0156291.	2.5	6
48	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
49	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
50	Isolation of two insecticidal toxins from venom of the Australian theraphosid spider Coremiocnemis tropix. Toxicon, 2016, 123, 62-70.	1.6	14
51	Selective spider toxins reveal a role for the Nav1.1 channel in mechanical pain. Nature, 2016, 534, 494-499.	27.8	239
52	Venom from the spider Araneus ventricosus is lethal to insects but inactive in vertebrates. Toxicon, 2016, 115, 63-69.	1.6	6
53	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
54	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

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55	Weaponization of a Hormone: Convergent Recruitment of Hyperglycemic Hormone into the Venom of Arthropod Predators. Structure, 2015, 23, 1283-1292.	3.3	66
56	Chapter 8. Therapeutic Applications ofÂSpider-Venom Peptides. RSC Drug Discovery Series, 2015, , 221-244.	0.3	11
57	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
58	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
59	Methods for Deployment of Spider Venom Peptides as Bioinsecticides. Advances in Insect Physiology, 2014, , 389-411.	2.7	15
60	A distinct sodium channel voltage-sensor locus determines insect selectivity of the spider toxin Dc1a. Nature Communications, 2014, 5, 4350.	12.8	63
61	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
62	The Neurotoxic Mode of Action of Venoms from the Spider Family Theraphosidae. , 2013, , 203-215.		2
63	The insecticidal potential of venom peptides. Cellular and Molecular Life Sciences, 2013, 70, 3665-3693.	5.4	110
64	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
65	Do Vicinal Disulfide Bridges Mediate Functionally Important Redox Transformations in Proteins?. Antioxidants and Redox Signaling, 2013, 19, 1976-1980.	5.4	16
66	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
67	Spider-Venom Peptides as Bioinsecticides. Toxins, 2012, 4, 191-227.	3.4	190
68	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
69	Spider-venom peptides that target voltage-gated sodium channels: Pharmacological tools and potential therapeutic leads. Toxicon, 2012, 60, 478-491.	1.6	202
70	ArachnoServer 2.0, an updated online resource for spider toxin sequences and structures. Nucleic Acids Research, 2011, 39, D653-D657.	14.5	159
71	TTX, cations and spider venom modify avian muscle tone in vitro. Journal of Venom Research, 2011, 2, 1-5.	0.6	0
72	Spider-Venom Peptides as Therapeutics. Toxins, 2010, 2, 2851-2871.	3.4	251

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73	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
74	ArachnoServer: a database of protein toxins from spiders. BMC Genomics, 2009, 10, 375.	2.8	58
75	Intersexual variations in the pharmacological properties of Coremiocnemis tropix (Araneae,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.6	38
76	Neurotoxic and insecticidal properties of venom from the Australian theraphosid spider Selenotholus foelschei. NeuroToxicology, 2008, 29, 471-475.	3.0	28
77	Intersexual variations in Northern (Missulena pruinosa) and Eastern (M. bradleyi) mouse spider venom. Toxicon, 2008, 51, 1167-1177.	1.6	41
78	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
79	Amygdala cannulation alters expression of cocaine conditioned place preference and locomotion in rats. Addiction Biology, 2007, 12, 478-481.	2.6	5
80	Repeated-testing of place preference expression for evaluation of anti-craving-drug effects. Amino Acids, 2005, 28, 309-317.	2.7	8
81	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
82	Effects of MPEP on expression of food-, MDMA- or amphetamine-conditioned place preference in rats. Addiction Biology, 2005, 10, 243-249.	2.6	60
83	Ontogenetic changes in Phoneutria nigriventer (Araneae, Ctenidae) spider venom. Toxicon, 2004, 44, 635-640.	1.6	29
84	Effects of MPEP on locomotion, sensitization and conditioned reward induced by cocaine or morphine. Neuropharmacology, 2004, 47, 973-984.	4.1	98
85	Intersexual variations in the venom of the Brazilian â€˜armedâ€™ spider Phoneutria nigriventer (Keyserling,) Tj ETQq1 1 0.784314 rgBT	1.6	42