The toxicogenomic multiverse: convergent recruitment of proteins into animal venoms

DOI: 10.1146/annurev.genom.9.081307.164356
Annual Review of Genomics and Human Genetics, 2009, 10, 483-511.

#	Paper	IF	Citations
638	Biologically active compounds from coelenterates. **1982**, 54, 1981-1994		63
637	Toxins and venoms. **2009**, 19, R931-5		46
636	Tentacles of venom: toxic protein convergence in the Kingdom Animalia. **2009**, 68, 311-21		54
635	Causes and evolutionary significance of genetic convergence. **2010**, 26, 400-5		132
634	The venom composition of the parasitic wasp Chelonus inanitus resolved by combined expressed sequence tags analysis and proteomic approach. **2010**, 11, 693		80
633	Identical skin toxins by convergent molecular adaptation in frogs. **2010**, 20, 125-30		40
632	Convergent evolution: pick your poison carefully. **2010**, 20, R152-4		13
631	Drosotoxin, a selective inhibitor of tetrodotoxin-resistant sodium channels. **2010**, 80, 1296-302		18
630	Molecular diversity of toxic components from the scorpion Heterometrus petersii venom revealed by proteomic and transcriptome analysis. **2010**, 10, 2471-85		75
629	Functional and structural diversification of the Anguimorpha lizard venom system. **2010**, 9, 2369-90		58
628	Potassium channel modulation by a toxin domain in matrix metalloprotease 23. **2010**, 285, 9124-36		56
627	Structure and mechanism in salivary proteins from blood-feeding arthropods. **2010**, 56, 1120-9		44
626	Platelet aggregation inhibitors from hematophagous animals. **2010**, 56, 1130-44		90
625	Identification and characterization of venom proteins of two solitary wasps, Eumenes pomiformis and Orancistrocerus drewseni. **2010**, 56, 554-62		28
624	Lysophospholipids are evolutionary ancient venom components. **2010**, 56, 1525-7		1
623	□conotoxin KIIIA derivatives with divergent affinities versus efficacies in blocking voltage-gated sodium channels. **2010**, 49, 4804-12		27
622	An insight into the sialome of blood-feeding Nematocera. **2010**, 40, 767-84		127

621	Snake Venomics, Antivenomics, and Venom Phenotyping: The M□age □Trois of Proteomic Tools Aimed at Understanding the Biodiversity of Venoms. **2010**, 45-72	9
620	Mining on scorpion venom biodiversity. **2010**, 56, 1155-61	139
619	Novel venom gene discovery in the platypus. **2010**, 11, R95	45
618	Specialisation of the venom gland proteome in predatory cone snails reveals functional diversification of the conotoxin biosynthetic pathway. **2011**, 10, 3904-19	37
617	Venom Composition and Strategies in Spiders: Is Everything Possible?. **2011**, 40, 1-86	98
616	A novel natriuretic peptide from the cobra venom. **2011**, 57, 134-40	15
615	Cloning and sequence analysis of an Ophiophagus hannah cDNA encoding a precursor of two natriuretic peptide domains. **2011**, 57, 811-6	4
614	Intraspecific variation in the venom of the vermivorous cone snail Conus vexillum. **2011**, 154, 318-25	28
613	Conus magus vs. Irukandji syndrome: a computational approach of a possible new therapy. **2011**, 86, 195-202	3
612	A heteromeric Texas coral snake toxin targets acid-sensing ion channels to produce pain. **2011**, 479, 410-4	242
611	Chemometric analysis of Hymenoptera toxins and defensins: A model for predicting the biological activity of novel peptides from venoms and hemolymph. **2011**, 32, 1924-33	8
610	Venoms as a platform for human drugs: translating toxins into therapeutics. **2011**, 11, 1469-84	366
609	Proteomic tools against the neglected pathology of snake bite envenoming. **2011**, 8, 739-58	141
608	Isolation and Characterization of a Natriuretic Peptide from Crotalus oreganus abyssus (Grand Canyon Rattlesnake) and its Effects on Systemic Blood Pressure and Nitrite Levels. **2011**, 17, 165-173	9
607	Venomics: a new paradigm for natural products-based drug discovery. **2011**, 40, 15-28	152
606	Profiling the venom gland transcriptomes of Costa Rican snakes by 454 pyrosequencing. **2011**, 12, 259	84
605	Niedermolekulare Verbindungen aus Spinnen als chemische Sensoren. **2011**, 123, 11492-11508	2
604	Small molecules from spiders used as chemical probes. **2011**, 50, 11296-311	16

603	Ending the drought: new strategies for improving the flow of affordable, effective antivenoms in Asia and Africa. **2011**, 74, 1735-67		161
602	Embryonic toxin expression in the cone snail Conus victoriae: primed to kill or divergent function?. **2011**, 286, 22546-57		26
601	SdPI, the first functionally characterized Kunitz-type trypsin inhibitor from scorpion venom. **2011**, 6, e27548		46
600	Unique scorpion toxin with a putative ancestral fold provides insight into evolution of the inhibitor cystine knot motif. **2011**, 108, 10478-83		82
599	A limited role for gene duplications in the evolution of platypus venom. *Molecular Biology and Evolution*, **2012**, 29, 167-77	8.3	30
598	Disintegrins from hematophagous sources. *Toxins*, **2012**, 4, 296-322	4.9	30
597	Proteomics and deep sequencing comparison of seasonally active venom glands in the platypus reveals novel venom peptides and distinct expression profiles. **2012**, 11, 1354-64		35
596	An Insight into the Sialomes of Bloodsucking Heteroptera. **2012**, 2012, 1-16		12
595	Optimizing cholinergic tone through lynx modulators of nicotinic receptors: implications for plasticity and nicotine addiction. **2012**, 27, 187-99		39
594	Conservation of group XII phospholipase A2 from bacteria to human. **2012**, 7, 340-50		4
593	A new multigene superfamily of Kunitz-type protease inhibitors from sea anemone Heteractis crispa. **2012**, 34, 88-97		27
592	Characterization of BmKbpp, a multifunctional peptide from the Chinese scorpion Mesobuthus martensii Karsch: gaining insight into a new mechanism for the functional diversification of scorpion venom peptides. **2012**, 33, 44-51		46
591	Replies to Fry et´al. (Toxicon 2012, 60/4, 434-448). Part B. Properties and biological roles of squamate oral products: The "venomous lifestyle" and preadaptation. **2012**, 60, 964-6		17
590	Chemical punch packed in venoms makes centipedes excellent predators. **2012**, 11, 640-50		89
589	Resurrexit, sicut dixit, alleluia. Snake venomics from a 26-year old polyacrylamide focusing gel. **2012**, 75, 1074-8		6
588	Snake venomics of two poorly known Hydrophiinae: Comparative proteomics of the venoms of terrestrial Toxicocalamus longissimus and marine Hydrophis cyanocinctus. **2012**, 75, 4091-101		51
587	Venom evolution through gene duplications. **2012**, 496, 1-7		73
586	The mammary gland-specific marsupial ELP and eutherian CTI share a common ancestral gene. **2012**, 12, 80		11

585	Juruin: an antifungal peptide from the venom of the Amazonian Pink Toe spider, Avicularia juruensis, which contains the inhibitory cystine knot motif. **2012**, 3, 324		23
584	Looking over toxin-K(+) channel interactions. Clues from the structural and functional characterization of κKTx toxin Tc32, a Kv1.3 channel blocker. **2012**, 51, 1885-94		11
583	Pharmacologically Active Compounds from Ticks and Other Arthropods and Their Potential Use in Anticancer Therapy. **2012**, 163-182		2
582	Vascular effects and electrolyte homeostasis of the natriuretic peptide isolated from Crotalus oreganus abyssus (North American Grand Canyon rattlesnake) venom. **2012**, 36, 206-12		14
581	Spider-venom peptides as bioinsecticides. *Toxins*, **2012**, 4, 191-227	4.9	137
580	Enhancement in motor learning through genetic manipulation of the Lynx1 gene. **2012**, 7, e43302		28
579	An insight into the sialotranscriptome of the cat flea, Ctenocephalides felis. **2012**, 7, e44612		20
578	What Hydra can teach us about chemical ecology -how a simple, soft organism survives in a hostile aqueous environment. **2012**, 56, 605-11		9
577	Triplatin, a platelet aggregation inhibitor from the salivary gland of the triatomine vector of Chagas disease, binds to TXA(2) but does not interact with glycoprotein PVI. **2012**, 107, 111-23		19
576	Hg1, novel peptide inhibitor specific for Kv1.3 channels from first scorpion Kunitz-type potassium channel toxin family. **2012**, 287, 13813-21		99
575	Allergic host defences. **2012**, 484, 465-72		270
574	Conus venom peptide pharmacology. **2012**, 64, 259-98		314
573	New tricks of an old pattern: structural versatility of scorpion toxins with common cysteine spacing. **2012**, 287, 12321-30		42
572	Proteome of Hydra nematocyst. **2012**, 287, 9672-9681		73
571	Extreme diversity of scorpion venom peptides and proteins revealed by transcriptomic analysis: implication for proteome evolution of scorpion venom arsenal. **2012**, 75, 1563-76		87
570	High-resolution picture of a venom gland transcriptome: case study with the marine snail Conus consors. **2012**, 59, 34-46		73
569	Venomous mammals: a review. **2012**, 59, 680-95		45
568	The structural and functional diversification of the Toxicofera reptile venom system. **2012**, 60, 434-48		111

567	Novel transcripts in the maxillary venom glands of advanced snakes. **2012**, 59, 696-708		48
566	Receptor-targeting mechanisms of pain-causing toxins: How ow?. **2012**, 60, 254-64		51
565	Origin and convergent evolution of exendin genes. **2012**, 175, 27-33		15
564	Response to Jackson et al. (2012). **2013**, 64, 116-27		4
563	Response to "Replies to Fry et´al. (Toxicon 2012, 60/4, 434-448). Part B. Analyses of squamate reptile oral glands and their products: A call for caution in formal assignment of terminology designating biological function". **2013**, 64, 113-5		2
562	Transcriptome analysis of venom glands from a single fishing spider Dolomedes mizhoanus. **2013**, 73, 23-32		22
561	Integrated "omics" profiling indicates that miRNAs are modulators of the ontogenetic venom composition shift in the Central American rattlesnake, Crotalus simus simus. **2013**, 14, 234		137
560	Molecular and bioinformatical characterization of a novel superfamily of cysteine-rich peptides from arthropods. **2013**, 41, 45-58		9
559	Identification of novel phospholipase A2 group IX members in metazoans. **2013**, 95, 1534-43		8
558	Molecular evolution of latrotoxin, the exceptionally potent vertebrate neurotoxin in black widow spider venom. *Molecular Biology and Evolution*, **2013**, 30, 999-1014	8.3	69
557	Bee venom phospholipase A2 induces a primary type 2 response that is dependent on the receptor ST2 and confers protective immunity. **2013**, 39, 976-85		141
556	Are there unequivocal criteria to label a given protein as a toxin? Permissive versus conservative annotation processes. **2013**, 14, 406		6
555	Biochemical and electrophysiological characterization of two sea anemone type 1 potassium toxins from a geographically distant population of Bunodosoma caissarum. *Marine Drugs*, **2013**, 11, 655-79	6	22
554	Isolation, homology modeling and renal effects of a C-type natriuretic peptide from the venom of the Brazilian yellow scorpion (Tityus serrulatus). **2013**, 74, 19-26		10
553	Complex cocktails: the evolutionary novelty of venoms. **2013**, 28, 219-29		584
552	Response to "Replies to Fry et´al. (Toxicon 2012, 60/4, 434-448). Part A. Analyses of squamate reptile oral glands and their products: A call for caution in formal assignment of terminology designating biological function". **2013**, 64, 106-12		7
551	The "Vampirome": Transcriptome and proteome analysis of the principal and accessory submaxillary glands of the vampire bat Desmodus rotundus, a vector of human rabies. **2013**, 82, 288-319		35
550	High molecular weight components of the injected venom of fish-hunting cone snails target the vascular system. **2013**, 91, 97-105		12

549	Functional characterization on invertebrate and vertebrate tissues of tachykinin peptides from octopus venoms. **2013**, 47, 71-6		14
548	Top-down sequencing of Apis dorsata apamin by MALDI-TOF MS and evidence of its inactivity against microorganisms. **2013**, 71, 105-12		8
547	Evolution of the tissue factor pathway inhibitor-like Kunitz domain-containing protein family in Rhipicephalus microplus. **2013**, 43, 81-94		15
546	Role of the inflammasome in defense against venoms. **2013**, 110, 1809-14		38
545	Non-front-fanged colubroid snakes: a current evidence-based analysis of medical significance. **2013**, 69, 103-13		49
544	Spider-venom peptides: structure, pharmacology, and potential for control of insect pests. **2013**, 58, 475-96		267
543	The Evolution of a Toxic Enzyme in Sicariid Spiders. **2013**, 229-240		2
542	The venom optimization hypothesis revisited. **2013**, 63, 120-8		115
541	Snake venomics: from the inventory of toxins to biology. **2013**, 75, 44-62		146
540	Fusion expression and purification of four disulfide-rich peptides reveals enterokinase secondary cleavage sites in animal toxins. **2013**, 39, 145-51		11
539	The insecticidal potential of venom peptides. **2013**, 70, 3665-93		77
538	Dracula's children: molecular evolution of vampire bat venom. **2013**, 89, 95-111		50
537	Cloning and characterization of a novel Kunitz-type inhibitor from scorpion with unique cysteine framework. **2013**, 72, 5-10		15
536	Variability of venom components in immune suppressive parasitoid wasps: from a phylogenetic to a population approach. **2013**, 59, 205-12		38
535	Evolution of venom across extant and extinct eulipotyphlans. **2013**, 12, 531-542		17
534	Analysis of soluble protein contents from the nematocysts of a model sea anemone sheds light on venom evolution. **2013**, 15, 329-39		73
533	Three-fingered RAVERs: Rapid Accumulation of Variations in Exposed Residues of snake venom toxins. *Toxins*, **2013**, 5, 2172-208	4.9	85
532	Short toxin-like proteins attack the defense line of innate immunity. *Toxins*, **2013**, 5, 1314-31	4.9	12

531	Atractaspis aterrima toxins: the first insight into the molecular evolution of venom in side-stabbers. *Toxins*, **2013**, 5, 1948-64	4.9	15
530	Venom down under: dynamic evolution of Australian elapid snake toxins. *Toxins*, **2013**, 5, 2621-55	4.9	48
529	Squeezers and leaf-cutters: differential diversification and degeneration of the venom system in toxicoferan reptiles. **2013**, 12, 1881-99		39
528	Multiple actions of phi-LITX-Lw1a on ryanodine receptors reveal a functional link between scorpion DDH and ICK toxins. **2013**, 110, 8906-11		31
527	Scorpion Peptides. **2013**, 423-429		14
526	How the venom from the ectoparasitoid Wasp nasonia vitripennis exhibits anti-inflammatory properties on mammalian cell lines. **2014**, 9, e96825		23
525	Defensins: antifungal lessons from eukaryotes. **2014**, 5, 97		68
524	Conotoxins targeting nicotinic acetylcholine receptors: an overview. *Marine Drugs*, **2014**, 12, 2970-3004	6	112
523	Fixierung cyclischer Peptide: Mimetika von Proteinstrukturmotiven. **2014**, 126, 13234-13257		67
522	Nemertean toxin genes revealed through transcriptome sequencing. **2014**, 6, 3314-25		14
521	Next-generation snake venomics: protein-locus resolution through venom proteome decomplexation. **2014**, 11, 315-29		87
520	Holocyclotoxin-1, a cystine knot toxin from Ixodes holocyclus. **2014**, 90, 308-17		20
519	Toxicity of scorpion venom in chick embryo and mealworm assay depending on the use of the soluble fraction versus the whole venom. **2014**, 88, 38-43		5
518	Quo vadis venomics? A roadmap to neglected venomous invertebrates. *Toxins*, **2014**, 6, 3488-551	4.9	64
517	The future of venoms-based drug discovery: an interview with Glenn King. **2014**, 6, 1613-5		5
516	Spider venomics: implications for drug discovery. **2014**, 6, 1699-714		68
515	VTBuilder: a tool for the assembly of multi isoform transcriptomes. **2014**, 15, 389		24
514	Transcriptomics and venomics: implications for medicinal chemistry. **2014**, 6, 1629-43		8

513	Parallel evolution of tetrodotoxin resistance in three voltage-gated sodium channel genes in the garter snake Thamnophis sirtalis. *Molecular Biology and Evolution*, **2014**, 31, 2836-46	8.3	42
512	Tracing monotreme venom evolution in the genomics era. *Toxins*, **2014**, 6, 1260-73	4.9	9
511	Poisons, toxungens, and venoms: redefining and classifying toxic biological secretions and the organisms that employ them. *Biological Reviews*, **2014**, 89, 450-65	13.5	57
510	Poke but don't pinch: risk assessment and venom metering in the western black widow spider, Latrodectus hesperus. **2014**, 89, 107-114		26
509	Polypharmacology profiles and phylogenetic analysis of three-finger toxins from mamba venom: case of aminergic toxins. **2014**, 103, 109-17		19
508	Unusual binding mode of scorpion toxin BmKTX onto potassium channels relies on its distribution of acidic residues. **2014**, 447, 70-6		31
507	Understanding the evolutionary structural variability and target specificity of tick salivary Kunitz peptides using next generation transcriptome data. **2014**, 14, 4		24
506	Spider genomes provide insight into composition and evolution of venom and silk. **2014**, 5, 3765		169
505	Recruitment and diversification of an ecdysozoan family of neuropeptide hormones for black widow spider venom expression. **2014**, 536, 366-75		23
504	Experimental conversion of a defensin into a neurotoxin: implications for origin of toxic function. *Molecular Biology and Evolution*, **2014**, 31, 546-59	8.3	52
503	Insights into function and evolution of parasitoid wasp venoms. **2014**, 6, 52-60		54
502	Venom regeneration in the centipede Scolopendra polymorpha: evidence for asynchronous venom component synthesis. **2014**, 117, 398-414		8
501	Maturity-related changes in venom toxicity of the freshwater stingray Potamotrygon leopoldi. **2014**, 92, 97-101		5
500	Restriction and recruitment-gene duplication and the origin and evolution of snake venom toxins. **2014**, 6, 2088-95		99
499	Discovery of a new subclass of □conotoxins in the venom of Conus australis. **2014**, 91, 145-54		20
498	Cancer research meets tick vectors for infectious diseases. **2014**, 14, 916-7		15
497	A Polychaete's powerful punch: venom gland transcriptomics of Glycera reveals a complex cocktail of toxin homologs. **2014**, 6, 2406-23		50
496	Clawing through evolution: toxin diversification and convergence in the ancient lineage Chilopoda (centipedes). *Molecular Biology and Evolution*, **2014**, 31, 2124-48	8.3	69

495	Evolution of separate predation- and defence-evoked venoms in carnivorous cone snails. **2014**, 5, 3521		203
494	BF9, the first functionally characterized snake toxin peptide with Kunitz-type protease and potassium channel inhibiting properties. **2014**, 28, 76-83		29
493	Molecular cloning of a hyaluronidase from Bothrops pauloensis venom gland. **2014**, 20, 25		10
492	Constraining cyclic peptides to mimic protein structure motifs. **2014**, 53, 13020-41		277
491	Modulation of TRP ion channels by venomous toxins. **2014**, 223, 1119-42		5
490	A ray of venom: Combined proteomic and transcriptomic investigation of fish venom composition using barb tissue from the blue-spotted stingray (Neotrygon kuhlii). **2014**, 109, 188-98		22
489	A distinct sodium channel voltage-sensor locus determines insect selectivity of the spider toxin Dc1a. **2014**, 5, 4350		51
488	Diversification of a single ancestral gene into a successful toxin superfamily in highly venomous Australian funnel-web spiders. **2014**, 15, 177		39
487	Dramatic expansion of the black widow toxin arsenal uncovered by multi-tissue transcriptomics and venom proteomics. **2014**, 15, 366		58
486	The first venomous crustacean revealed by transcriptomics and functional morphology: remipede venom glands express a unique toxin cocktail dominated by enzymes and a neurotoxin. *Molecular Biology and Evolution*, **2014**, 31, 48-58	8.3	70
485	Hydra actinoporin-like toxin-1, an unusual hemolysin from the nematocyst venom of Hydra magnipapillata which belongs to an extended gene family. **2014**, 91, 103-13		22
484	Variation in venom yield and protein concentration of the centipedes Scolopendra polymorpha and Scolopendra subspinipes. **2014**, 82, 30-51		8
483	Venom toxicity and composition in three Pseudomyrmex ant species having different nesting modes. **2014**, 88, 67-76		16
482	Dual role of the cuttlefish salivary proteome in defense and predation. **2014**, 108, 209-22		32
481	Extraction of venom and venom gland microdissections from spiders for proteomic and transcriptomic analyses. **2014**, e51618		17
480	Are ticks venomous animals?. **2014**, 11, 47		52
479	Biological Toxins. **2014**, 175-180		
478	Venomous poisonous animals and toxins. **2015**, 279-283		

477	A single conserved basic residue in the potassium channel filter region controls KCNQ1 insensitivity toward scorpion toxins. **2015**, 3, 62-67		0
476	The Utility of Genome Skimming for Phylogenomic Analyses as Demonstrated for Glycerid Relationships (Annelida, Glyceridae). **2015**, 7, 3443-62		41
475	Gene duplications are extensive and contribute significantly to the toxic proteome of nematocysts isolated from Acropora digitifera (Cnidaria: Anthozoa: Scleractinia). **2015**, 16, 774		32
474	Transcriptome and proteome of Conus planorbis identify the nicotinic receptors as primary target for the defensive venom. **2015**, 15, 4030-40		20
473	Scorpion Toxin, BmP01, Induces Pain by Targeting TRPV1 Channel. *Toxins*, **2015**, 7, 3671-87	4.9	37
472	Exploring the Potential of Venom from Nasonia vitripennis as Therapeutic Agent with High-Throughput Screening Tools. *Toxins*, **2015**, 7, 2051-70	4.9	7
471	Venom Proteins from Parasitoid Wasps and Their Biological Functions. *Toxins*, **2015**, 7, 2385-412	4.9	112
470	Cabinet of Curiosities: Venom Systems and Their Ecological Function in Mammals, with a Focus on Primates. *Toxins*, **2015**, 7, 2639-58	4.9	57
469	Centipede venoms and their components: resources for potential therapeutic applications. *Toxins*, **2015**, 7, 4832-51	4.9	33
468	Honeybee venom proteome profile of queens and winter bees as determined by a mass spectrometric approach. *Toxins*, **2015**, 7, 4468-83	4.9	44
467	Secretory Gene Recruitments in Vampire Bat Salivary Adaptation and Potential Convergences With Sanguivorous Leeches. **2015**, 3,		8
466	Weaponization of a Hormone: Convergent Recruitment of Hyperglycemic Hormone into the Venom of Arthropod Predators. **2015**, 23, 1283-92		47
465	Spider, bacterial and fungal phospholipase D toxins make cyclic phosphate products. **2015**, 108, 176-80		12
464	The Physiology and Genomics of Social Transitions in Aphids. **2015**, 48, 163-188		7
463	Characterization of the gila monster (Heloderma suspectum suspectum) venom proteome. **2015**, 117, 1-11		20
462	CHAPTER 2:The Structural Universe of Disulfide-Rich Venom Peptides. **2015**, 37-79		10
461	Chapter 8:Therapeutic Applications of ´Spider-Venom Peptides. **2015**, 221-244		7
460	Combinations of long peptide sequence blocks can be used to describe toxin diversification in venomous animals. **2015**, 95, 84-92		6

459	The Genome 10K Project: a way forward. **2015**, 3, 57-111		223
458	Centipede venom: recent discoveries and current state of knowledge. *Toxins*, **2015**, 7, 679-704	4.9	66
457	Venomous Frogs Use Heads as Weapons. **2015**, 25, 2166-70		41
456	Testing the 'toxin hypothesis of allergy': mast cells, IgE, and innate and acquired immune responses to venoms. **2015**, 36, 80-7		25
455	SjAPI-2 is the first member of a new neurotoxin family with Ascaris-type fold and KCNQ1 inhibitory activity. **2015**, 79, 504-10		11
454	Snake venoms: A brief treatise on etymology, origins of terminology, and definitions. **2015**, 103, 188-95		12
453	Molecular Diversity and Gene Evolution of the Venom Arsenal of Terebridae Predatory Marine Snails. **2015**, 7, 1761-78		27
452	Ancient Venom Systems: A Review on Cnidaria Toxins. *Toxins*, **2015**, 7, 2251-71	4.9	125
451	Variability in venom volume, flow rate and duration in defensive stings of five scorpion species. **2015**, 100, 60-6		17
450	A RNA-seq approach to identify putative toxins from acrorhagi in aggressive and non-aggressive Anthopleura elegantissima polyps. **2015**, 16, 221		47
449	CHAPTER 1:Seeing the Woods for the Trees: Understanding Venom Evolution as a Guide for Biodiscovery. **2015**, 1-36		10
448	Venom Proteomics of Indonesian King Cobra, Ophiophagus hannah: Integrating Top-Down and Bottom-Up Approaches. **2015**, 14, 2539-56		76
447	The effect of selection environment on the probability of parallel evolution. *Molecular Biology and Evolution*, **2015**, 32, 1436-48	8.3	75
446	Production and packaging of a biological arsenal: evolution of centipede venoms under morphological constraint. **2015**, 112, 4026-31		42
445	Engineered nanoparticles mimicking cell membranes for toxin neutralization. **2015**, 90, 69-80		84
444	Constructing comprehensive venom proteome reference maps for integrative venomics. **2015**, 12, 557-73		55
443	Transcriptome and venom proteome of the box jellyfish Chironex fleckeri. **2015**, 16, 407		73
442	A pain-inducing centipede toxin targets the heat activation machinery of nociceptor TRPV1. **2015**, 6, 8297		68

441	The venomous cocktail of the vampire snail Colubraria reticulata (Mollusca, Gastropoda). **2015**, 16, 441		32
440	The Strategic Use of Venom by Spiders. **2015**, 1-18		2
439	Phylogeny of Annelida. **2015**, 1-12		1
438	Latarcins: versatile spider venom peptides. **2015**, 72, 4501-22		39
437	Multidimensional Drift of Sequence Attributes and Functional Profiles in the Superfamily of the Three-Finger Proteins and Their Structural Homologues. **2015**, 55, 2026-41		6
436	Engineering a peptide inhibitor towards the KCNQ1/KCNE1 potassium channel (IKs). **2015**, 71, 77-83		8
435	Venom-related transcripts from Bothrops jararaca tissues provide novel molecular insights into the production and evolution of snake venom. *Molecular Biology and Evolution*, **2015**, 32, 754-66	8.3	67
434	The dynamically evolving nematocyst content of an anthozoan, a scyphozoan, and a hydrozoan. *Molecular Biology and Evolution*, **2015**, 32, 740-53	8.3	71
433	Expression of venom gene homologs in diverse python tissues suggests a new model for the evolution of snake venom. *Molecular Biology and Evolution*, **2015**, 32, 173-83	8.3	68
432	NMR structure of bitistatin □a missing piece in the evolutionary pathway of snake venom disintegrins. **2015**, 282, 341-60		16
431	Functional characterization of a new non-Kunitz serine protease inhibitor from the scorpion Lychas mucronatus. **2015**, 72, 158-62		11
430	False positive tests for ciguatera may derail efforts to control invasive lionfish. **2015**, 98, 961-969		6
429	Kunitz-Type Peptide HCRG21 from the Sea Anemone Heteractis crispa Is a Full Antagonist of the TRPV1 Receptor. *Marine Drugs*, **2016**, 14,	6	34
428	Rapid Radiations and the Race to Redundancy: An Investigation of the Evolution of Australian Elapid Snake Venoms. *Toxins*, **2016**, 8,	4.9	45
427	Differential Properties of Venom Peptides and Proteins in Solitary vs. Social Hunting Wasps. *Toxins*, **2016**, 8, 32	4.9	44
426	Structure-Activity Relationship of Chlorotoxin-Like Peptides. *Toxins*, **2016**, 8, 36	4.9	15
425	Venoms of Heteropteran Insects: A Treasure Trove of Diverse Pharmacological Toolkits. *Toxins*, **2016**, 8, 43	4.9	38
424	The Scorpion Toxin Analogue BmKTX-D33H as a Potential Kv1.3 Channel-Selective Immunomodulator for Autoimmune Diseases. *Toxins*, **2016**, 8, 115	4.9	15

423	Colubrid Venom Composition: An -Omics Perspective. *Toxins*, **2016**, 8,	4.9	48
422	Varespladib (LY315920) Appears to Be a Potent, Broad-Spectrum, Inhibitor of Snake Venom Phospholipase A2 and a Possible Pre-Referral Treatment for Envenomation. *Toxins*, **2016**, 8,	4.9	95
421	The Snake with the Scorpion's Sting: Novel Three-Finger Toxin Sodium Channel Activators from the Venom of the Long-Glanded Blue Coral Snake (Calliophis bivirgatus). *Toxins*, **2016**, 8,	4.9	35
420	Snake Genome Sequencing: Results and Future Prospects. *Toxins*, **2016**, 8,	4.9	21
419	Transcriptome Analysis to Understand the Toxicity of Latrodectus tredecimguttatus Eggs. *Toxins*, **2016**, 8,	4.9	5
418	In Vitro Mode of Action and Anti-thrombotic Activity of Boophilin, a Multifunctional Kunitz Protease Inhibitor from the Midgut of a Tick Vector of Babesiosis, Rhipicephalus microplus. **2016**, 10, e0004298		20
417	Toxin structures as evolutionary tools: Using conserved 3D folds to study the evolution of rapidly evolving peptides. **2016**, 38, 539-48		54
416	Tick paralysis: Some host and tick perspectives. **2016**, 165-176		1
415	Engineering the Protein Corona of a Synthetic Polymer Nanoparticle for Broad-Spectrum Sequestration and Neutralization of Venomous Biomacromolecules. **2016**, 138, 16604-16607		49
414	[Venoms and medical research]. **2016**, 210, 89-99		2
413	Mast cells and IgE in defense against venoms: Possible "good side" of allergy?. **2016**, 65, 3-15		47
412	IgE and mast cells in host defense against parasites and venoms. **2016**, 38, 581-603		103
411	Protease inhibitor in scorpion (Mesobuthus eupeus) venom prolongs the biological activities of the crude venom. **2016**, 14, 607-14		10
410	A combined proteomic and transcriptomic analysis of slime secreted by the southern bottletail squid, Sepiadarium austrinum (Cephalopoda). **2016**, 148, 170-82		11
409	Intragenome Diversity of Gene Families Encoding Toxin-like Proteins in Venomous Animals. **2016**, 56, 938-949		11
408	Evolution of Toxin. **2016**, 113-134		2
407	Centipede venoms as a source of drug leads. **2016**, 11, 1139-1149		21
406	Cubozoan Envenomations: Clinical Features, Pathophysiology and Management. **2016**, 637-652		3

405	Combined Transcriptomic and Proteomic Analysis of the Posterior Salivary Gland from the Southern Blue-Ringed Octopus and the Southern Sand Octopus. **2016**, 15, 3284-97	15
404	Dietary breadth is positively correlated with venom complexity in cone snails. **2016**, 17, 401	60
403	Integrating Perspectives on Animal Venom Diversity: An Introduction to the Symposium. **2016**, 56, 934-937	1
402	Evidence for an Alternative Mechanism of Toxin Production in the Box Jellyfish Alatina alata. **2016**, 56, 973-988	11
401	A sodium channel inhibitor ISTX-I with a novel structure provides a new hint at the evolutionary link between two toxin folds. **2016**, 6, 29691	6
400	Tissue-Specific Venom Composition and Differential Gene Expression in Sea Anemones. **2016**, 8, 2358-75	51
399	The challenge of integrating proximate and ultimate causes to reconstruct the natural histories of venoms: the evolutionary link. **2016**, 13, 1059-1061	2
398	A new transcriptome and transcriptome profiling of adult and larval tissue in the box jellyfish Alatina alata: an emerging model for studying venom, vision and sex. **2016**, 17, 650	23
397	Effects of Gene Duplication, Positive Selection, and Shifts in Gene Expression on the Evolution of the Venom Gland Transcriptome in Widow Spiders. **2016**, 8, 228-42	26
396	Spider Transcriptomes from Venom Glands: Molecular Diversity of Ion Channel Toxins and Antimicrobial Peptide Transcripts. **2016**, 223-249	
395	Deadly Innovations: Unraveling the Molecular Evolution of Animal Venoms. **2016**, 1-27	8
394	A colostrum trypsin inhibitor gene expressed in the Cape fur seal mammary gland during lactation. **2016**, 578, 7-16	3
393	The Platypus: A Venomous Mammal. **2016**, 169-183	3
392	Scorpion Potassium Channel-blocking Defensin Highlights a Functional Link with Neurotoxin. **2016**, 291, 7097-106	35
391	Ancestral reconstruction of tick lineages. **2016**, 7, 509-35	49
390	Genome assembly and geospatial phylogenomics of the bed bug Cimex lectularius. **2016**, 7, 10164	46
389	Venomous extract protein profile of Brazilian tarantula Grammostola iheringi: searching for potential biotechnological applications. **2016**, 136, 35-47	19
388	IgE antibodies, FcεRI, and IgE-mediated local anaphylaxis can limit snake venom toxicity. **2016**, 137, 246-257.e11	41

387	Ecological venomics: How genomics, transcriptomics and proteomics can shed new light on the ecology and evolution of venom. **2016**, 135, 62-72	51
386	An intimate link between antimicrobial peptide sequence diversity and binding to essential components of bacterial membranes. **2016**, 1858, 958-70	60
385	Hormone-like peptides in the venoms of marine cone snails. **2017**, 244, 11-18	37
384	Synthetic peptide antigens derived from long-chain alpha-neurotoxins: Immunogenicity effect against elapid venoms. **2017**, 88, 80-86	11
383	St20, a new venomous animal derived natural peptide with immunosuppressive and anti-inflammatory activities. **2017**, 127, 37-43	6
382	Melt With This Kiss: Paralyzing and Liquefying Venom of The Assassin Bug (Hemiptera: Reduviidae). **2017**, 16, 552-566	35
381	Venomics: integrative venom proteomics and beyond. **2017**, 474, 611-634	103
380	Lys49 myotoxin from the Brazilian lancehead pit viper elicits pain through regulated ATP release. **2017**, 114, E2524-E2532	23
379	A prokineticin-like protein responds to immune challenges in the gastropod pest Pomacea canaliculata. **2017**, 72, 37-43	8
378	Proteomic and transcriptomic analysis of saliva components from the hematophagous reduviid Triatoma pallidipennis. **2017**, 162, 30-39	13
377	Correlation between ontogenetic dietary shifts and venom variation in Australian brown snakes (Pseudonaja). **2017**, 197, 53-60	39
376	Strategies in 'snake venomics' aiming at an integrative view of compositional, functional, and immunological characteristics of venoms. **2017**, 23, 26	79
375	Green mamba peptide targets type-2 vasopressin receptor against polycystic kidney disease. **2017**, 114, 7154-7159	24
374	Absolute venomics: Absolute quantification of intact venom proteins through elemental mass spectrometry. **2017**, 164, 33-42	34
373	Silk gene expression of theridiid spiders: implications for male-specific silk use. **2017**, 122, 107-114	18
372	An alternative pathway to eusociality: Exploring the molecular and functional basis of fortress defense. **2017**, 71, 1986-1998	4
371	Phylogeny of Annelida. **2017**, 399-413	2
370	Functional and Genetic Diversity of Toxins in Sea Anemones. **2017**, 87-104	4

369	Parasitoid Wasps and Their Venoms. **2017**, 187-212		5
368	A workflow for in silico design of hIL-10 and ebvIL-10 inhibitors using well-known miniprotein scaffolds. **2017**, 23, 118		
367	Discovery of three toxin peptides with Kv1.3 channel and IL-2 cytokine-inhibiting activities from Non-Buthidae scorpions, Chaerilus tricostatus and Chaerilus tryznai. **2017**, 91, 13-19		5
366	Minor snake venom proteins: Structure, function and potential applications. **2017**, 1861, 824-838		47
365	Endless forms most beautiful: the evolution of ophidian oral glands, including the venom system, and the use of appropriate terminology for homologous structures. **2017**, 136, 107-130		24
364	Coevolution takes the sting out of it: Evolutionary biology and mechanisms of toxin resistance in animals. **2017**, 140, 118-131		43
363	Tracing the Evolutionary History of the CAP Superfamily of Proteins Using Amino Acid Sequence Homology and Conservation of Splice Sites. **2017**, 85, 137-157		14
362	Snakebite envenoming. **2017**, 3, 17063		362
361	Changes in predator exposure, but not in diet, induce phenotypic plasticity in scorpion venom. *Proceedings of the Royal Society B: Biological Sciences*, **2017**, 284,	4.4	18
360	Revisiting venom of the sea anemone Stichodactyla haddoni: Omics techniques reveal the complete toxin arsenal of a well-studied sea anemone genus. **2017**, 166, 83-92		45
359	Comparative proteomics reveals recruitment patterns of some protein families in the venoms of Cnidaria. **2017**, 137, 19-26		16
358	Multiomics analysis of the giant triton snail salivary gland, a crown-of-thorns starfish predator. **2017**, 7, 6000		14
357	Catch a tiger snake by its tail: Differential toxicity, co-factor dependence and antivenom efficacy in a procoagulant clade of Australian venomous snakes. **2017**, 202, 39-54		29
356	A bimodal activation mechanism underlies scorpion toxin-induced pain. **2017**, 3, e1700810		33
355	Evolution: Gene Co-option Underpins Venom Protein Evolution. **2017**, 27, R647-R649		6
354	Ancestral protein resurrection and engineering opportunities of the mamba aminergic toxins. **2017**, 7, 2701		14
353	Comparative analyses of glycerotoxin expression unveil a novel structural organization of the bloodworm venom system. **2017**, 17, 64		11
352	Enhanced transcriptomic responses in the Pacific salmon louse Lepeophtheirus salmonis oncorhynchi to the non-native Atlantic Salmon Salmo salar suggests increased parasite fitness. **2017**, 18, 110		12

351	House spider genome uncovers evolutionary shifts in the diversity and expression of black widow venom proteins associated with extreme toxicity. **2017**, 18, 178		31
350	Bacterial and Arachnid Sphingomyelinases D: Comparison of Biophysical and Pathological Activities. **2017**, 118, 2053-2063		5
349	Convergent evolution of defensin sequence, structure and function. **2017**, 74, 663-682		92
348	Lipid metabolism in Rhodnius prolixus: Lessons from the genome. **2017**, 596, 27-44		11
347	Peptidomics of Acanthoscurria gomesiana spider venom reveals new toxins with potential antimicrobial activity. **2017**, 151, 232-242		26
346	Identification of snake venom allergens by two-dimensional electrophoresis followed by immunoblotting. **2017**, 125, 13-18		10
345	Venoms. **2017**, 99-128		2
344	Evaluation of the physiological activity of venom from the Eurasian water shrew. **2017**, 14, 46		11
343	Salivary Glands in Predatory Mollusks: Evolutionary Considerations. **2017**, 8, 580		14
342	Target-Specificity in Scorpions; Comparing Lethality of Scorpion Venoms across Arthropods and Vertebrates. *Toxins*, **2017**, 9,	4.9	12
341	From Marine Venoms to Drugs: Efficiently Supported by a Combination of Transcriptomics and Proteomics. *Marine Drugs*, **2017**, 15,	6	21
340	Protein Discovery: Combined Transcriptomic and Proteomic Analyses of Venom from the Endoparasitoid Cotesia chilonis (Hymenoptera: Braconidae). *Toxins*, **2017**, 9,	4.9	23
339	Coagulating Colubrids: Evolutionary, Pathophysiological and Biodiscovery Implications of Venom Variations between Boomslang (Dispholidus typus) and Twig Snake (Thelotornis mossambicanus). *Toxins*, **2017**, 9,	4.9	24
338	Enter the Dragon: The Dynamic and Multifunctional Evolution of Anguimorpha Lizard Venoms. *Toxins*, **2017**, 9,	4.9	26
337	Biochemical characterization and comparison of aspartylglucosaminidases secreted in venom of the parasitoid wasps Asobara tabida and Leptopilina heterotoma. **2017**, 12, e0181940		5
336	De novo characterization of venom apparatus transcriptome of Pardosa pseudoannulata and analysis of its gene expression in response to Bt protein. **2017**, 17, 73		6
335	Overlooked Short Toxin-Like Proteins: A Shortcut to Drug Design. *Toxins*, **2017**, 9,	4.9	4
334	The assassin bug Pristhesancus plagipennis produces two distinct venoms in separate gland lumens. **2018**, 9, 755		43

333	Targeted Sequencing of Venom Genes from Cone Snail Genomes Improves Understanding of Conotoxin Molecular Evolution. *Molecular Biology and Evolution*, **2018**, 35, 1210-1224	8.3	22
332	Chemical Ecology and Sociality in Aphids: Opportunities and Directions. **2018**, 44, 770-784		4
331	Detoxifying symbiosis: microbe-mediated detoxification of phytotoxins and pesticides in insects. **2018**, 35, 434-454		66
330	Are Fireworms Venomous? Evidence for the Convergent Evolution of Toxin Homologs in Three Species of Fireworms (Annelida, Amphinomidae). **2018**, 10, 249-268		19
329	Proteotranscriptomic Analysis and Discovery of the Profile and Diversity of Toxin-like Proteins in Centipede. **2018**, 17, 709-720		8
328	Marine Leech Anticoagulant Diversity and Evolution. **2018**, 104, 210-220		10
327	Spider's venom phospholipases D: A structural review. **2018**, 107, 1054-1065		9
326	Immune drug discovery from venoms. **2018**, 141, 18-24		7
325	When is overkill optimal? Tritrophic interactions reveal new insights into venom evolution. **2018**, 11, 141-149		5
324	Toxins: Neurotoxins. **2018**,		0
323	Potential Applications of Venom Peptides as Anti-Thrombotic Agents for Management of Arterial and Deep-Vein Thrombosis. **2018**, 25, 677-687		3
322	Peptidomic characterization and bioactivity of Protoiurus kraepelini (Scorpiones: Iuridae) venom. **2018**, 42, 490-497		4
321	Coagulotoxic Cobras: Clinical Implications of Strong Anticoagulant Actions of African Spitting Naja Venoms That Are Not Neutralised by Antivenom but Are by LY315920 (Varespladib). *Toxins*, **2018**, 10,	4.9	54
320	Evolutionary dynamics of origin and loss in the deep history of phospholipase D toxin genes. **2018**, 18, 194		5
319	Buzz Kill: Function and Proteomic Composition of Venom from the Giant Assassin Fly (Diptera: Asilidae). *Toxins*, **2018**, 10,	4.9	9
318	A comparative venomic fingerprinting approach reveals that galling and non-galling fig wasp species have different venom profiles. **2018**, 13, e0207051		1
317	Scratching the Surface of an Itch: Molecular Evolution of Aculeata Venom Allergens. **2018**, 86, 484-500		4
316	Deep sequencing analysis of toad skin glands and partial biochemical characterization of its cutaneous secretion. **2018**, 24, 36		5

315	Phylogenetic Comparative Methods can Provide Important Insights into the Evolution of Toxic Weaponry. *Toxins*, **2018**, 10,	4.9	5
314	Entomo-venomics: The evolution, biology and biochemistry of insect venoms. **2018**, 154, 15-27		37
313	Toxin diversity revealed by the venom gland transcriptome of Pardosa pseudoannulata, a natural enemy of several insect pests. **2018**, 28, 172-182		6
312	Snake venom components in medicine: From the symbolic rod of Asclepius to tangible medical research and application. **2018**, 104, 94-113		13
311	A salamander's toxic arsenal: review of skin poison diversity and function in true salamanders, genus Salamandra. **2018**, 105, 56		19
310	Shotgun Proteomics Analysis of Saliva and Salivary Gland Tissue from the Common Octopus Octopus vulgaris. **2018**, 17, 3866-3876		10
309	Three-Finger Toxin Diversification in the Venoms of Cat-Eye Snakes (Colubridae: Boiga). **2018**, 86, 531-545		9
308	Engineering varied serine protease inhibitors by converting P1 site of BF9, a weakly active Kunitz-type animal toxin. **2018**, 120, 1190-1197		6
307	Anti-haemostatic compounds from the vampire snail Cumia reticulata: Molecular cloning and in-silico structure-function analysis. **2018**, 75, 168-177		3
306	Animal Toxins as Therapeutic Tools to Treat Neurodegenerative Diseases. **2018**, 9, 145		38
305	Definition of the R-superfamily of conotoxins: Structural convergence of helix-loop-helix peptidic scaffolds. **2018**, 107, 75-82		5
304	Poly-Xaa Sequences in Proteins - Biological Role and Interactions with Metal Ions: Chemical and Medical Aspects. **2018**, 25, 22-48		3
303	An overview of Phoneutria nigriventer spider venom using combined transcriptomic and proteomic approaches. **2018**, 13, e0200628		22
302	Proteomic Analyses of the Unexplored Sea Anemone Bunodactis verrucosa. *Marine Drugs*, **2018**, 16,	6	13
301	A Dipteran's Novel Sucker Punch: Evolution of Arthropod Atypical Venom with a Neurotoxic Component in Robber Flies (Asilidae, Diptera). *Toxins*, **2018**, 10,	4.9	22
300	Classes, Databases, and Prediction Methods of Pharmaceutically and Commercially Important Cystine-Stabilized Peptides. *Toxins*, **2018**, 10,	4.9	2
299	Tick Paralysis: Solving an Enigma. **2018**, 5,		15
298	PHAB toxins: a unique family of predatory sea anemone toxins evolving via intra-gene concerted evolution defines a new peptide fold. **2018**, 75, 4511-4524		20

297	Combined proteomic and functional analysis reveals rich sources of protein diversity in skin mucus and venom from the Scorpaena plumieri fish. **2018**, 187, 200-211		12
296	Microbial production of toxins from the scorpion venom: properties and applications. **2018**, 102, 6319-6331		9
295	Transcriptome analysis provides insights into the immunity function of venom glands in Pardosa pseudoannulata in responses to cadmium toxicity. **2018**, 25, 23875-23882		7
294	Novel Naja atra cardiotoxin 1 (CTX-1) derived antimicrobial peptides with broad spectrum activity. **2018**, 13, e0190778		17
293	Cnidarian peptide neurotoxins: a new source of various ion channel modulators or blockers against central nervous systems disease. **2019**, 24, 189-197		15
292	Venom Composition Does Not Vary Greatly Between Different Nematocyst Types Isolated from the Primary Tentacles of (Cnidaria: Hydrozoa). **2019**, 237, 26-35		6
291	Parallel Evolution of Complex Centipede Venoms Revealed by Comparative Proteotranscriptomic Analyses. *Molecular Biology and Evolution*, **2019**, 36, 2748-2763	8.3	14
290	Coral Venom Toxins. **2019**, 7,		7
289	Transcriptomic Analysis of the Influence of Methanol Assimilation on the Gene Expression in the Recombinant Producing Hirudin Variant 3. **2019**, 10,		3
288	Uncapping the N-terminus of a ubiquitous His-tag peptide enhances its Cu binding affinity. **2019**, 48, 13567-13579		1
287	Toxins from scratch? Diverse, multimodal gene origins in the predatory robber fly Dasypogon diadema indicate a dynamic venom evolution in dipteran insects. **2019**, 8,		11
286	A randomized, triple-blind, placebo-controlled clinical trial, evaluating the sesamin supplement effects on proteolytic enzymes, inflammatory markers, and clinical indices in women with rheumatoid arthritis. **2019**, 33, 2421-2428		14
285	Molecular composition of the paralyzing venom of three solitary wasps (Hymenoptera: Pompilidae) collected in southeast Mexico. **2019**, 168, 98-102		0
284	When spider and snake get along: Fusion of a snake disintegrin with a spider phospholipase D to explore their synergistic effects on a tumor cell. **2019**, 168, 40-48		5
283	Venom Diversity and Evolution in the Most Divergent Cone Snail Genus. *Toxins*, **2019**, 11,	4.9	7
282	Vampire Venom: Vasodilatory Mechanisms of Vampire Bat () Blood Feeding. *Toxins*, **2019**, 11,	4.9	6
281	Isolation of a Novel Metalloproteinase from Agkistrodon Venom and Its Antithrombotic Activity Analysis. **2019**, 20,		5
280	Snake Venom in Context: Neglected Clades and Concepts. **2019**, 7,		30

279	Phylogeny-Guided Selection of Priority Groups for Venom Bioprospecting: Harvesting Toxin Sequences in Tarantulas as a Case Study. *Toxins*, **2019**, 11,	4.9	8
278	Animal venoms: therapeutic tools for tackling Parkinson's disease. **2019**, 24, 2202-2211		7
277	Identification of Kir Channels as Putative Targets of the Bee Venom Peptide Tertiapin Using Structure-Based Virtual Screening Methods. *Toxins*, **2019**, 11,	4.9	1
276	Snake Venoms in Drug Discovery: Valuable Therapeutic Tools for Life Saving. *Toxins*, **2019**, 11,	4.9	57
275	Polypeptides secreted from the columnar vesicles of the sea anemone Bunodosoma cangicum and their in vivo effects on Caenorhabditis elegans. **2019**, 43, 429-436		1
274	Combined transcriptomic and proteomic analysis reveals a diversity of venom-related and toxin-like peptides expressed in the mat anemone Zoanthus natalensis (Cnidaria, Hexacorallia). **2019**, 93, 1745-1767		8
273	Sea Anemone Toxins: A Structural Overview. *Marine Drugs*, **2019**, 17,	6	22
272	"Beyond Primary Sequence"-Proteomic Data Reveal Complex Toxins in Cnidarian Venoms. **2019**, 59, 777-785		10
271	Convergent recruitment of adamalysin-like metalloproteases in the venom of the red bark centipede (Scolopocryptops sexspinosus). **2019**, 168, 1-15		5
270	Differential destructive (non-clotting) fibrinogenolytic activity in Afro-Asian elapid snake venoms and the links to defensive hooding behavior. **2019**, 60, 330-335		14
269	Overview on the Systematics of Biotoxins as Threat Agents. **2019**, 339-357		
268	Venom Costs and Optimization in Scorpions. **2019**, 7,		21
267	Dissecting Toxicity: The Venom Gland Transcriptome and the Venom Proteome of the Highly Venomous Scorpion (Karsch, 1879). *Toxins*, **2019**, 11,	4.9	15
266	Varanid Lizard Venoms Disrupt the Clotting Ability of Human Fibrinogen through Destructive Cleavage. *Toxins*, **2019**, 11,	4.9	7
265	Investigation of the estuarine stonefish (Synanceia horrida) venom composition. **2019**, 201, 12-26		5
264	The Significance of Comparative Genomics in Modern Evolutionary Venomics. **2019**, 7,		14
263	The Dual Prey-Inactivation Strategy of Spiders-In-Depth Venomic Analysis of. *Toxins*, **2019**, 11,	4.9	19
262	Effects of Selective Substitution of Cysteine Residues on the Conformational Properties of Chlorotoxin Explored by Molecular Dynamics Simulations. **2019**, 20,		0

261	A Novel Phospholipase A2 Isolated from Possesses Neurotoxic Activity. *Toxins*, **2019**, 11,	4.9	1
260	The hidden biotechnological potential of marine invertebrates: The Polychaeta case study. **2019**, 173, 270-280		9
259	A process of convergent amplification and tissue-specific expression dominates the evolution of toxin and toxin-like genes in sea anemones. **2019**, 28, 2272-2289		29
258	Revisiting Polybia paulista wasp venom using shotgun proteomics - Insights into the N-linked glycosylated venom proteins. **2019**, 200, 60-73		6
257	Alternative Transcription at Venom Genes and Its Role as a Complementary Mechanism for the Generation of Venom Complexity in the Common House Spider. **2019**, 7,		7
256	Serum-based inhibition of pitviper venom by eastern indigo snakes (). **2019**, 8,		3
255	Inhibitory Effect of Metalloproteinase Inhibitors on Skin Cell Inflammation Induced by Jellyfish Nematocyst Venom. *Toxins*, **2019**, 11,	4.9	5
254	Basal but divergent: Clinical implications of differential coagulotoxicity in a clade of Asian vipers. **2019**, 58, 195-206		21
253	Venom Mediates Vasodilatation of Resistance Like Arteries via Activation of K and K Channels. *Toxins*, **2019**, 11,	4.9	4
252	Evolutionary Ecology of Fish Venom: Adaptations and Consequences of Evolving a Venom System. *Toxins*, **2019**, 11,	4.9	19
251	Solenodon genome reveals convergent evolution of venom in eulipotyphlan mammals. **2019**, 116, 25745-25755		22
250	Not so Dangerous After All? Venom Composition and Potency of the Pholcid (Daddy Long-Leg) Spider. **2019**, 7,		5
249	The Diversity of Venom: The Importance of Behavior and Venom System Morphology in Understanding Its Ecology and Evolution. *Toxins*, **2019**, 11,	4.9	56
248	Identification and Characterization of ShSPI, a Kazal-Type Elastase Inhibitor from the Venom of. *Toxins*, **2019**, 11,	4.9	0
247	High Specific Efficiency of Venom of Two Prey-Specialized Spiders. *Toxins*, **2019**, 11,	4.9	9
246	Hadrurid Scorpion Toxins: Evolutionary Conservation and Selective Pressures. *Toxins*, **2019**, 11,	4.9	4
245	Beyond the 'big four': Venom profiling of the medically important yet neglected Indian snakes reveals disturbing antivenom deficiencies. **2019**, 13, e0007899		48
244	Animal Venom Peptides as a Treasure Trove for New Therapeutics Against Neurodegenerative Disorders. **2019**, 26, 4749-4774		12

243	The Harderian gland transcriptomes of Caraiba andreae, Cubophis cantherigerus and Tretanorhinus variabilis, three colubroid snakes from Cuba. **2019**, 111, 1720-1727		4
242	A Centipede Toxin Family Defines an Ancient Class of CSαβ Defensins. **2019**, 27, 315-326.e7		9
241	Beetle and Plant Arrow Poisons of the San People of Southern Africa. **2019**, 11-71		4
240	Role of a serine protease gene (AccSp1) from Apis cerana cerana in abiotic stress responses and innate immunity. **2019**, 24, 29-43		1
239	Habu coagulotoxicity: Clinical implications of the functional diversification of Protobothrops snake venoms upon blood clotting factors. **2019**, 55, 62-74		21
238	The evolution and origin of tetrodotoxin acquisition in the blue-ringed octopus (genus Hapalochlaena). **2019**, 206, 114-122		10
237	Expression and characterization of Flavikunin: A Kunitz-type serine protease inhibitor identified in the venom gland cDNA library of Bungarus flaviceps. **2019**, 33, e22273		1
236	Arthropod venoms: Biochemistry, ecology and evolution. **2019**, 158, 84-103		14
235	Antiplatelet properties of snake venoms: a mini review. **2020**, 39, 14-23		2
234	Conformational dynamics of [Formula: see text]-conotoxin PnIB in complex solvent systems. **2020**, 24, 1291-1299		1
233	Macroevolutionary Analyses Suggest That Environmental Factors, Not Venom Apparatus, Play Key Role in Terebridae Marine Snail Diversification. **2020**, 69, 413-430		2
232	Weaponisation 'on the fly': Convergent recruitment of knottin and defensin peptide scaffolds into the venom of predatory assassin flies. **2020**, 118, 103310		7
231	Scorpion venomics: a 2019 overview. **2020**, 17, 67-83		12
230	Widespread Evolution of Molecular Resistance to Snake Venom αNeurotoxins in Vertebrates. *Toxins*, **2020**, 12,	4.9	8
229	Conformational ensembles of non-peptide αconotoxin mimetics and Ca ion binding to human voltage-gated N-type calcium channel Ca2.2. **2020**, 18, 2357-2372		1
228	Potent virucidal activity of honeybee "Apis mellifera" venom against Hepatitis C Virus. **2020**, 188, 55-64		2
227	A Review of Toxins from Cnidaria. *Marine Drugs*, **2020**, 18,	6	17
226	A snake toxin as a theranostic agent for the type 2 vasopressin receptor. **2020**, 10, 11580-11594		3

225	Toxin-like neuropeptides in the sea anemone unravel recruitment from the nervous system to venom. **2020**, 117, 27481-27492		10
224	Evolutionary Aspects of the Structural Convergence and Functional Diversification of Kunitz-Domain Inhibitors. **2020**, 88, 537-548		3
223	Kinome scale profiling of venom effects on cancer cells reveals potential new venom activities. **2020**, 185, 129-146		2
222	An Economic Dilemma Between Molecular Weapon Systems May Explain an Arachno-atypical Venom in Wasp Spiders (). *Biomolecules*, **2020**, 10,	5.9	6
221	The Multilocus Multispecies Coalescent: A Flexible New Model of Gene Family Evolution. **2021**, 70, 822-837		3
220	Proteo-Transcriptomic Analysis Identifies Potential Novel Toxins Secreted by the Predatory, Prey-Piercing Ribbon Worm. *Marine Drugs*, **2020**, 18,	6	4
219	A comparison of the structure and function of nematocysts in free-living and parasitic cnidarians (Myxozoa). **2020**, 50, 763-769		12
218	Individual variation in cardiotoxicity of parotoid secretion of the common toad, Bufo bufo, depends on body size - first results. **2020**, 142, 125822		1
217	A Multiomics Approach Unravels New Toxins With Possible Antimicrobial, Antiviral, and Antitumoral Activities in the Venom of. **2020**, 11, 1075		9
216	Transcriptomic Analysis of Four Cerianthid (Cnidaria, Ceriantharia) Venoms. *Marine Drugs*, **2020**, 18,	6	6
215	Molecular evolution of gland cell types and chemical interactions in animals. **2020**, 223,		16
214	Highlights of animal venom research on the geographical variations of toxin components, toxicities and envenomation therapy. **2020**, 165, 2994-3006		7
213	Fraternine, a Novel Wasp Peptide, Protects against Motor Impairments in 6-OHDA Model of Parkinsonism. *Toxins*, **2020**, 12,	4.9	4
212	Deadly Proteomes: A Practical Guide to Proteotranscriptomics of Animal Venoms. **2020**, 20, e1900324		10
211	Size Matters: An Evaluation of the Molecular Basis of Ontogenetic Modifications in the Composition of Snake Venom. *Toxins*, **2020**, 12,	4.9	4
210	How the Toxin got its Toxicity. **2020**, 11, 574925		6
209	Pick Your Poison: Molecular Evolution of Venom Proteins in Asilidae (Insecta: Diptera). *Toxins*, **2020**, 12,	4.9	1
208	Tiergifte als Quelle neuartiger Bioressourcen. **2020**, 26, 724-727		

207	Synergies with and Resistance to Membrane-Active Peptides. **2020**, 9,		3
206	Putative Antimicrobial Peptides of the Posterior Salivary Glands from the Cephalopod Revealed by Exploring a Composite Protein Database. **2020**, 9,		4
205	Structural venomics reveals evolution of a complex venom by duplication and diversification of an ancient peptide-encoding gene. **2020**, 117, 11399-11408		29
204	Comparative proteomic analysis to probe into the differences in protein expression profiles and toxicity bases of Latrodectus tredecimguttatus spiderlings and adult spiders. **2020**, 232, 108762		2
203	The functions of CAP superfamily proteins in mammalian fertility and disease. **2020**, 26, 689-723		8
202	Salmon immunological defence and interplay with the modulatory capabilities of its ectoparasite Lepeophtheirus salmonis. **2020**, 42, e12731		2
201	Venom Systems as Models for Studying the Origin and Regulation of Evolutionary Novelties. *Molecular Biology and Evolution*, **2020**, 37, 2777-2790	8.3	14
200	Tick-Borne Flavivirus Inhibits Sphingomyelinase (SMase), a Venomous Spider Ortholog to Increase Sphingomyelin Lipid Levels for Its Survival in Ticks. **2020**, 10, 244		8
199	Revealing the Venomous Secrets of the Spider's Web. **2020**, 19, 3044-3059		2
198	Comparative transcriptomics of the venoms of continental and insular radiations of West African cones. *Proceedings of the Royal Society B: Biological Sciences*, **2020**, 287, 20200794	4.4	6
197	Toxinology provides multidirectional and multidimensional opportunities: A personal perspective. **2020**, 6, 100039		1
196	Causes and Consequences of Snake Venom Variation. **2020**, 41, 570-581		70
195	Cloning and identification of a new multifunctional Ascaris-type peptide from the hemolymph of Buthus martensii Karsch. **2020**, 184, 167-174		1
194	Animal toxins - Nature's evolutionary-refined toolkit for basic research and drug discovery. **2020**, 181, 114096		43
193	A new multigene HCIQ subfamily from the sea anemone Heteractis crispa encodes Kunitz-peptides exhibiting neuroprotective activity against 6-hydroxydopamine. **2020**, 10, 4205		7
192	Mast cells and IgE in defense against lethality of venoms: Possible "benefit" of allergy[]. **2020**, 29, 46-62		8
191	Venomics of the Duvernoy's gland secretion of the false coral snake Rhinobothryum bovallii (Andersson, 1916) and assessment of venom lethality towards synapsid and diapsid animal models. **2020**, 225, 103882		4
190	A Comprehensive Multi-Omic Approach Reveals a Relatively Simple Venom in a Diet Generalist, the Northern Short-Tailed Shrew, Blarina brevicauda. **2020**, 12, 1148-1166		4

189	Neuropeptide signalling systems - An underexplored target for venom drug discovery. **2020**, 181, 114129		7
188	Extended Snake Venomics by Top-Down In-Source Decay: Investigating the Newly Discovered Anatolian Meadow Viper Subspecies,. **2020**, 19, 1731-1749		9
187	Quantitative Proteomic Analysis of the Slime and Ventral Mantle Glands of the Striped Pyjama Squid (). **2020**, 19, 1491-1501		2
186	Diet Breadth Mediates the Prey Specificity of Venom Potency in Snakes. *Toxins*, **2020**, 12,	4.9	23
185	The Toxicological Intersection between Allergen and Toxin: A Structural Comparison of the Cat Dander Allergenic Protein Fel d1 and the Slow Loris Brachial Gland Secretion Protein. *Toxins*, **2020**, 12,	4.9	4
184	Mast cells and IgE in defense against lethality of venoms: Possible "benefit" of allergy*. **2020**, 29, 34-50		
183	, the most important snake involved in human envenomings in the amazon: How venomics contributes to the knowledge of snake biology and clinical toxinology. **2020**, 6, 100037		20
182	Characterising Functional Venom Profiles of Anthozoans and Medusozoans within Their Ecological Context. *Marine Drugs*, **2020**, 18,	6	13
181	A data-driven integrative platform for computational prediction of toxin biotransformation with a case study. **2021**, 408, 124810		0
180	Armed stem to stinger: a review of the ecological roles of scorpion weapons. **2021**, 27, e20210002		4
179	Insights into how development and life-history dynamics shape the evolution of venom. **2021**, 12, 1		4
178	Produktion von Giften und Abwehrstoffen. **2021**, 963-986		
177	Effects of venoms on neutrophil respiratory burst: a major inflammatory function. **2021**, 27, e20200179		1
176	Levels and distribution of tetrodotoxin in the blue-lined octopus Hapalochlaena fasciata in Japan, with special reference to within-body allocation. **2021**, 87,		2
175	Biogeographical venom variation in the Indian spectacled cobra (Naja naja) underscores the pressing need for pan-India efficacious snakebite therapy. **2021**, 15, e0009150		23
174	Molecular diversity and evolutionary trends of cysteine-rich peptides from the venom glands of Chinese spider Heteropoda venatoria. **2021**, 11, 3211		1
173	Presence of a neprilysin on Avicularia juruensis (Mygalomorphae: Theraphosidae) venom. 1-10		0
172	The new COST Action European Venom Network (EUVEN)-synergy and future perspectives of modern venomics. **2021**, 10,		1

171	Venom Use in Eulipotyphlans: An Evolutionary and Ecological Approach. *Toxins*, **2021**, 13,	4.9	0
170	Sea Anemone Kunitz-Type Peptides Demonstrate Neuroprotective Activity in the 6-Hydroxydopamine Induced Neurotoxicity Model. **2021**, 9,		4
169	Jellyfish venom proteins and their pharmacological potentials: A review. **2021**, 176, 424-436		5
168	Identification of Novel Toxin Genes from the Stinging Nettle Caterpillar (Cramer, 1799): Insights into the Evolution of Lepidoptera Toxins. **2021**, 12,		1
167	Morphological Analysis Reveals a Compartmentalized Duct in the Venom Apparatus of the Wasp Spider (). *Toxins*, **2021**, 13,	4.9	1
166	Recruitment of toxin-like proteins with ancestral venom function supports endoparasitic lifestyles of Myxozoa. **2021**, 9, e11208		2
165	Production, composition, and mode of action of the painful defensive venom produced by a limacodid caterpillar,. **2021**, 118,		4
164	Age-dependent genetic architecture underlines similar heritability of body size in sticklebacks.		1
163	The genome of the venomous snail Lautoconus ventricosus sheds light on the origin of conotoxin diversity. **2021**, 10,		7
162	IgE antibodies increase honeybee venom responsiveness and detoxification efficiency of mast cells. **2021**,		3
161	Localization and Bioreactivity of Cysteine-Rich Secretions in the Marine Gastropod. *Marine Drugs*, **2021**, 19,	6	
160	Jararhagin, a snake venom metalloproteinase, induces mechanical hyperalgesia in mice with the neuroinflammatory contribution of spinal cord microglia and astrocytes. **2021**, 179, 610-619		1
159	Antithrombotic and anticoagulant effects of a novel protein isolated from the venom of the Deinagkistrodon acutus snake. **2021**, 138, 111527		4
158	Venom-Induced Blood Disturbances by Palearctic Viperid Snakes, and Their Relative Neutralization by Antivenoms and Enzyme-Inhibitors. **2021**, 12, 688802		4
157	BoaPLI from Boa constrictor Blood is a Broad-Spectrum Inhibitor of Venom PLA Pathophysiological Actions. **2021**, 47, 907-914		0
156	Proteo-Trancriptomic Analyses Reveal a Large Expansion of Metalloprotease-Like Proteins in Atypical Venom Vesicles of the Wasp (Braconidae). *Toxins*, **2021**, 13,	4.9	1
155	Mutual enlightenment: A toolbox of concepts and methods for integrating evolutionary and clinical toxinology via snake venomics and the contextual stance. **2021**, 9-10, 100070		8
154	A symphony of destruction: Dynamic differential fibrinogenolytic toxicity by rattlesnake (Crotalus and Sistrurus) venoms. **2021**, 245, 109034		4

153	GAS1: A New Glucan Immunostimulant Candidate to Increase Rainbow Trout () Resistance to Bacterial Infections With. **2021**, 12, 693613		3
152	The influence of ecological factors on cnidarian venoms. **2021**, 9-10, 100067		2
151	Ecological and biogeographic processes drive the proteome evolution of snake venom. **2021**, 30, 1978-1989		0
150	The Dragon's Paralysing Spell: Evidence of Sodium and Calcium Ion Channel Binding Neurotoxins in Helodermatid and Varanid Lizard Venoms. *Toxins*, **2021**, 13,	4.9	0
149	Fusion of parvovirus B19 receptor-binding domain and pneumococcal surface protein A induces protective immunity against parvovirus B19 and Streptococcus pneumoniae. **2021**, 39, 5146-5152		1
148	The biology and evolution of spider venoms. *Biological Reviews*, **2021**,	13.5	5
147	A Spider Toxin Exemplifies the Promises and Pitfalls of Cell-Free Protein Production for Venom Biodiscovery. *Toxins*, **2021**, 13,	4.9	0
146	Antimicrobial peptidomes of Bothrops atrox and Bothrops jararacussu snake venoms. **2021**, 53, 1635-1648		1
145	Remote homology clustering identifies lowly conserved families of effector proteins in plant-pathogenic fungi. **2021**, 7,		0
144	Biochemical and Proteomic Characterization, and Pharmacological Insights of Indian Red Scorpion Venom Toxins. **2021**, 12, 710680		0
143	A Common Endocrine Signature Marks the Convergent Evolution of an Elaborate Dance Display in Frogs. **2021**, 198, 522-539		1
142	Chromosome-level reference genome of the European wasp spider Argiope bruennichi: a resource for studies on range expansion and evolutionary adaptation. **2021**, 10,		11
141	A Transcriptomic Approach to the Recruitment of Venom Proteins in a Marine Annelid. *Toxins*, **2021**, 13,	4.9	2
140	Glandular Matrices and Secretions: Blood-Feeding Arthropods. **2016**, 625-688		8
139	Beach to Bench to Bedside: Marine Invertebrate Biochemical Adaptations and Their Applications in Biotechnology and Biomedicine. **2018**, 65, 359-376		1
138	Hypotensive Proteins from Hematophagous Animals. **2010**, 673-696		1
137	Secreted Phospholipases A2 with Neurotoxic Activity. **2017**, 67-86		2
136	The Strategic Use of Venom by Spiders. **2017**, 145-166		2

135	Evolutionary Context of Venom in Animals. **2017**, 3-31	11
134	Deadly Innovations: Unraveling the Molecular Evolution of Animal Venoms. **2014**, 1-23	1
133	Evolutionary Context of Venom in Animals. **2015**, 1-23	4
132	Functional and Genetic Diversity of Toxins in Sea Anemones. **2016**, 1-18	2
131	Parasitoid Wasps and Their Venoms. **2015**, 1-26	1
130	Parasitoid Wasps and Their Venoms. **2016**, 1-26	5
129	Venom Use in Mammals: Evolutionary Aspects. **2016**, 1-23	1
128	The evolutionary dynamics of venom toxins made by insects and other animals. **2020**, 48, 1353-1365	5
127	Venomic Interrogation Reveals the Complexity of Conus striolatus Venom. **2020**, 73, 357	3
126	Targeted sequencing of venom genes from cone snail genomes reveals coupling between dietary breadth and conotoxin diversity.	1
125	The Multilocus Multispecies Coalescent: A Flexible New Model of Gene Family Evolution.	2
124	Chromosome-level reference genome of the European wasp spider Argiope bruennichi: a resource for studies on range expansion and evolutionary adaptation.	2
123	Toxin-like neuropeptides in the sea anemone Nematostella unravel recruitment from the nervous system to venom.	1
122	A suppressor/enhancer screen in Drosophila reveals a role for wnt-mediated lipid metabolism in primordial germ cell migration. **2011**, 6, e26993	15
121	SjAPI, the first functionally characterized Ascaris-type protease inhibitor from animal venoms. **2013** , 8, e57529	31
120	Identification of new sphingomyelinases D in pathogenic fungi and other pathogenic organisms. **2013**, 8, e79240	20
119	Molecular evolution of vertebrate neurotrophins: co-option of the highly conserved nerve growth factor gene into the advanced snake venom arsenalf. **2013**, 8, e81827	37
118	Isolation, N-glycosylations and Function of a Hyaluronidase-Like Enzyme from the Venom of the Spider Cupiennius salei. **2015**, 10, e0143963	18

117	A salivary chitinase of Varroa destructor influences host immunity and mite's survival. **2020**, 16, e1009075		1
116	Why do we study animal toxins?. **2015**, 36, 183-222		51
115	Biochemical Modulation of Venom by Spiders is Achieved Via Compartmentalized Toxin Production and Storage.		1
114	Nanoparticles Functionalized with Venom-Derived Peptides and Toxins for Pharmaceutical Applications. **2020**, 21, 97-109		3
113	Behavioral, Physiological, Demographic and Ecological Impacts of Hematophagous and Endoparasitic Insects on an Arctic Ungulate. *Toxins*, **2020**, 12,	4.9	8
112	Dynamics of venom composition across a complex life cycle. **2018**, 7,		48
111	Sexually dimorphic venom proteins in long-jawed orb-weaving spiders () comprise novel gene families. **2018**, 6, e4691		13
110	Venomix: a simple bioinformatic pipeline for identifying and characterizing toxin gene candidates from transcriptomic data. **2018**, 6, e5361		11
109	Integration of phylogenomics and molecular modeling reveals lineage-specific diversification of toxins in scorpions. **2018**, 6, e5902		13
108	TOXIFY: a deep learning approach to classify animal venom proteins. **2019**, 7, e7200		6
107	A Short Review of the Venoms and Toxins of Spider Wasps (Hymenoptera: Pompilidae). *Toxins*, **2021**, 13,	4.9	1
106	Structures and interactions of insulin-like peptides from cone snail venom. **2021**,		0
105	The Platypus: A Venomous Mammal. **2014**, 1-13		
104	Secreted Phospholipases A2 with Neurotoxic Activity. **2015**, 1-15		
103	Spider Transcriptomes from Venom Glands: Molecular Diversity of Ion Channel Toxins and Antimicrobial Peptide Transcripts. **2015**, 1-20		1
102	On physiological mechanism of salivary secretion in ticks Argas persicus Oken, 1818 (Argasidae, Argas). **2016**, 3, 24-29		
101	Venom Use in Mammals: Evolutionary Aspects. **2017**, 235-257		
100	Dynamics of venom composition across a complex life cycle.		

99	Animal Venoms: Origin, Diversity and Evolution. 1-20	1
98	Structural venomics: evolution of a complex chemical arsenal by massive duplication and neofunctionalization of a single ancestral fold.	
97	Extended snake venomics by top-down in-source decay: Investigating the newly discovered Anatolian Meadow viper subspecies, Vipera anatolica senliki.	
96	An economic dilemma between weapon systems may explain an arachno-atypical venom in wasp spiders (Argiope bruennichi).	
95	Transcriptomic analysis of four cerianthid (Cnidaria, Ceriantharia) venoms.	1
94	Razor: annotation of signal peptides from toxins.	1
93	Hello, kitty: could cat allergy be a form of intoxication?. **2020**, 26, e20200051	
92	Pick Your Poison: Molecular Evolution of Venom Proteins in Asilidae (Insecta: Diptera).	
91	Mast Cells and IgE can Enhance Survival During Innate and Acquired Host Responses to Venoms. **2017**, 128, 193-221	12
90	The bee venom active compound melittin protects against bicuculline-induced seizures and hippocampal astrocyte activation in rats. **2021**, 91, 102209	0
89	Heilen mit Tiergiften.	
88	Venoms for all occasions: The functional toxin profiles of different anatomical regions in sea anemones are related to their ecological function. **2021**,	4
87	Draft genome of the Brazilian railroad worm Phrixothrix hirtus E.Olivier (Phengodidae: Coleoptera).	
86	Plasmodium falciparum Cysteine Rich Secretory Protein uniquely localizes to one end of male gametes.. **2022**, 248, 111447	0
85	A proteomics informed by transcriptomics insight into the proteome of Ornithodoros erraticus adult tick saliva.. **2022**, 15, 1	4
84	Bee core venom genes predominantly originated before aculeate stingers evolved.	0
83	OUP accepted manuscript.	0
82	Spatial Venomics - Cobra Venom System Reveals Spatial Differentiation of Snake Toxins by Mass Spectrometry Imaging.	0

81	Strategies for Heterologous Expression, Synthesis, and Purification of Animal Venom Toxins.. **2021**, 9, 811905		1
80	Sea anemone venom: Ecological interactions and bioactive potential.. **2022**,		1
79	Implications of bleaching on cnidarian venom ecology.. **2022**, 13, 100094		
78	[Bone marrow hematopoiesis. Evaluation of the myelogram]. **1990**, 35, 29-31		
77	The rise of genomics in snake venom research: recent advances and future perspectives.. **2022**, 11,		2
76	AsKC11, a Kunitz Peptide from , Is a Novel Activator of G Protein-Coupled Inward-Rectifier Potassium Channels.. *Marine Drugs*, **2022**, 20,	6	1
75	Bioactive Peptides and Proteins from Wasp Venoms.. *Biomolecules*, **2022**, 12,	5.9	1
74	Parallel evolutionary paths of rove beetle myrmecophiles: replaying a deep-time tape of life.. **2022**, 51, 100903		2
73	Chromosomal-level genome of a sheet-web spider provides insight into the composition and evolution of venom.. **2022**,		1
72	Proteotranscriptomic Analysis and Toxicity Assay Suggest the Functional Distinction between Venom Gland Chambers in Twin-Spotted Assassin Bug, .. **2022**, 11,		
71	Analysis of the Composition of Snake Venom Based on Proteomics, and Its Antithrombotic Activity and Toxicity Studies.. *Molecules*, **2022**, 27,	4.8	2
70	Proteotranscriptomics reveals the secretory dynamics of teratocytes, regulators of parasitization by the endoparasitoid wasp Cotesia flavipes.. **2022**, 104395		0
69	Reconstructing the Origins of the Somatostatin and Allatostatin-C Signaling Systems Using the Accelerated Evolution of Biodiverse Cone Snail Venoms.. *Molecular Biology and Evolution*, **2022**,	8.3	0
68	Profiling hymenopteran venom toxins: Protein families, structural landscape, biological activities, and pharmacological benefits.. **2022**, 14, 100119		0
67	An investigation into the toxicity of tissue extracts from two distinct marine Polychaeta.. **2022**, 14, 100116		1
66	: An Arboreal Pitviper in the Amazon and Atlantic Forest.. **2021**, 12, 778302		
65	Genome Analysis of : Unraveling the Genomic Landscape of a Successful Invader.. **2021**, 12, 790850		2
64	The cnidarian parasite utilizes inherited and recruited venom-like compounds during infection.. **2021**, 9, e12606		1

63	Co-option of the same ancestral gene family gave rise to mammalian and reptilian toxins.. **2021**, 19, 268		0
62	Venom gene sequence diversity and expression jointly shape diet adaptation in pitvipers.. *Molecular Biology and Evolution*, **2022**,	8.3	0
61	Image_1.JPEG. **2020**,		
60	Image_2.JPEG. **2020**,		
59	Image_3.JPEG. **2020**,		
58	Data_Sheet_1.PDF. **2019**,		
57	Data_Sheet_1.zip. **2019**,		
56	Data_Sheet_2.PDF. **2019**,		
55	Data_Sheet_3.PDF. **2019**,		
54	Data_Sheet_4.PDF. **2019**,		
53	Data_Sheet_5.PDF. **2019**,		
52	Data_Sheet_6.PDF. **2019**,		
51	Data_Sheet_7.PDF. **2019**,		
50	Data_Sheet_8.PDF. **2019**,		
49	Data_Sheet_9.PDF. **2019**,		
48	Table_1.XLSX. **2019**,		
47	Table_2.XLSX. **2019**,		
46	Table_3.XLSX. **2019**,		

45	Table_4.DOCX. **2019**,		
44	Table_5.XLSX. **2019**,		
43	Table_6.XLSX. **2019**,		
42	Data_Sheet_1.PDF. **2019**,		
41	Image_1.JPEG. **2019**,		
40	Table_1.XLSX. **2019**,		
39	Table_2.XLSX. **2019**,		
38	Table_3.XLSX. **2019**,		
37	DataSheet_1.xlsx. **2020**,		
36	Transcriptomic Insights into the Diversity and Evolution of Myxozoa (Cnidaria, Endocnidozoa) Toxin-like Proteins. *Marine Drugs*, **2022**, 20, 291	6	0
35	Evolution, expression patterns and distribution of novel ribbon worm predatory and defensive toxins.. *Molecular Biology and Evolution*, **2022**,	8.3	0
34	Convergent evolution of toxin resistance in animals.. *Biological Reviews*, **2022**,	13.5	4
33	Age-dependent genetic architecture across ontogeny of body size in sticklebacks.. *Proceedings of the Royal Society B: Biological Sciences*, **2022**, 289, 20220352	4.4	
32	Venomics of the Central European Myrmicine Ants Myrmica rubra and Myrmica ruginodis. *Toxins*, **2022**, 14, 358	4.9	1
31	A new, widespread venomous mammal species: hemolytic activity of Sorex araneus venom is similar to that of Neomys fodiens venom. *Zoological Letters*, **2022**, 8,	3	0
30	Contextual Constraints: Dynamic Evolution of Snake Venom Phospholipase A2. *Toxins*, **2022**, 14, 420	4.9	0
29	Molecular Characterization of Kunitz-Type Protease Inhibitors from Blister Beetles (Coleoptera, Meloidae). *Biomolecules*, **2022**, 12, 988	5.9	
28	Bioactive Peptides and Proteins from Centipede Venoms. *Molecules*, **2022**, 27, 4423	4.8	1

27	Envenoming by a Marine Blood Worm (Glycera). *Toxins*, **2022**, 14, 495	4.9
26	The Target Selects the Toxin: Specific Amino Acids in Snake-Prey Nicotinic Acetylcholine Receptors That Are Selectively Bound by King Cobra Venoms. **2022**, 14, 528	
25	Discovery of Novel Bilaterian Signaling Peptides Using Cone Snail Toxins.	
24	Characterization of the RACK1 gene of Aips cerana cerana and its role in adverse environmental stresses. **2022**, 110796	
23	Genomic Perspectives. **2022**, 207-268	
22	Somnolence, vomiting, and abdominal pain after centipede bite: a case report. 1-2	
21	Origin and Early Diversification of the Enigmatic Squamate Venom Cocktail. **2022**, 248-268	1
20	CAP superfamily proteins from venomous animals: Who we are and what to do?. **2022**, 221, 691-702	0
19	Diverse and Dynamic Alpha-Neurotoxicity Within Venoms from the Palearctic Viperid Snake Clade of Daboia, Macrovipera, Montivipera, and Vipera.	0
18	Screening of Phytochemicals Against Snake Venom Metalloproteinase: Molecular Docking and Simulation Based Computational Approaches. **2022**, 13, 76-84	0
17	Evaluation and diagnosis of mast cell‐associated disorders. **2022**, 579-626	0
16	How a tarantula can help treat infections:Avicularia juruensis‐theraphotoxins that also act as antimicrobials.	0
15	Never, Ever Make an Enemy‐Out of an Anemone: Transcriptomic Comparison of Clownfish Hosting Sea Anemone Venoms. **2022**, 20, 730	0
14	The Pharmacological Potential of Novel Melittin Variants from the Honeybee and Solitary Bees against Inflammation and Cancer. **2022**, 14, 818	1
13	Spatial Venomics-Cobra Venom System Reveals Spatial Differentiation of Snake Toxins by Mass Spectrometry Imaging.	1
12	Extreme Procoagulant Potency in Human Plasma of Venoms from the African Viperid Genera Atheris, Cerastes, and Proatheris and the Relative Efficacy of Antivenoms and Synthetic Enzyme-Inhibitors. **2022**, 14, 836	0
11	The Fast and the Furriest: Investigating the Rate of Selection on Mammalian Toxins. **2022**, 14, 842	0
10	The Sea Anemone Neurotoxins Modulating Sodium Channels: An Insight at Structure and Functional Activity after Four Decades of Investigation. **2023**, 15, 8	1

9	Domain loss enables evolution of novel functions in a gene superfamily, including snake 3-finger toxins.	0
8	Animal toxins: As an alternative therapeutic target following ischemic stroke condition. **2023**, 121365	0
7	Mapping interaction between big spaces; active space from protein structure and available chemical space. **2023**, 299-332	0
6	Venomous Noodles: evolution of toxins in Nemertea through positive selection and gene duplication.	0
5	Proteomic analysis of the mandibular glands from the Chinese crocodile lizard, Shinisaurus crocodilurus Another venomous lizard?. **2023**, 225, 107050	0
4	A bivalent remipede toxin promotes calcium release via ryanodine receptor activation. **2023**, 14,	0
3	In Vitro Anti-Venom Potentials of Aqueous Extract and Oils of Toona´ciliata M. Roem against Cobra Venom and Chemical Constituents of Oils. **2023**, 28, 3089	0
2	Genomic and transcriptomic analyses support a silk gland origin of spider venom glands. **2023**, 21,	0
1	Animal Toxins. **2023**, 547-628	0