Graham M Nicholson

List of Publications by Year
in descending order

93 papers	4,268 citations	81900 39 h-index	114465 63 g-index
97 all docs	97 docs citations	97 times ranked	2676 citing authors

#	Article	IF	Citations
1	Label-Free, Real-Time Phospholipase-A Isoform Assay. ACS Biomaterials Science and Engineering, 2020, 6, 4714-4721.	5.2	5
2	An Integrated Proteomic and Transcriptomic Analysis Reveals the Venom Complexity of the Bullet Ant Paraponera clavata. Toxins, 2020, 12, 324.	3.4	18
3	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
4	Venom Peptide Repertoire of the European Myrmicine Ant Manica rubida: Identification of Insecticidal Toxins. Journal of Proteome Research, 2020, 19, 1800-1811.	3.7	30
5	Structural characterization of protein toxins from Australian snake venoms using native mass spectrometry. Toxicon, 2019, 158, S43.	1.6	0
6	Evaluation of Chemical Strategies for Improving the Stability and Oral Toxicity of Insecticidal Peptides. Biomedicines, 2018, 6, 90.	3.2	7
7	Combined Peptidomic and Proteomic Analysis of Electrically Stimulated and Manually Dissected Venom from the South American Bullet Ant Paraponera clavata. Journal of Proteome Research, 2017, 16, 1339-1351.	3.7	22
8	Lethal effects of an insecticidal spider venom peptide involve positive allosteric modulation of insect nicotinic acetylcholine receptors. Neuropharmacology, 2017, 127, 224-242.	4.1	16
9	Insect-Active Toxins with Promiscuous Pharmacology from the African Theraphosid Spider Monocentropus balfouri. Toxins, 2017, 9, 155.	3.4	10
10	The Biochemical Toxin Arsenal from Ant Venoms. Toxins, 2016, 8, 30.	3.4	113
11	Nerveâ€“muscle activation by rotating permanent magnet configurations. Journal of Physiology, 2016, 594, 1799-1819.	2.9	9
12	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
13	Reply from Peter A. Watterson and Graham M. Nicholson. Journal of Physiology, 2016, 594, 3843-3844.	2.9	1
14	Comparisons of Protein and Peptide Complexity in Poneroid and Formicoid Ant Venoms. Journal of Proteome Research, 2016, 15, 3039-3054.	3.7	20
15	Isolation of two insecticidal toxins from venom of the Australian theraphosid spider Coremiocnemis tropix. Toxicon, 2016, 123, 62-70.	1.6	14
16	Weaponization of a Hormone: Convergent Recruitment of Hyperglycemic Hormone into the Venom of Arthropod Predators. Structure, 2015, 23, 1283-1292.	3.3	66
17	The complexity and structural diversity of ant venom peptidomes is revealed by mass spectrometry profiling. Rapid Communications in Mass Spectrometry, 2015, 29, 385-396.	1.5	32
18	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

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19	Diversity of peptide toxins from stinging ant venoms. Toxicon, 2014, 92, 166-178.	1.6	92
20	A distinct sodium channel voltage-sensor locus determines insect selectivity of the spider toxin Dc1a. Nature Communications, 2014, 5, 4350.	12.8	63
21	Elucidation of the unexplored biodiversity of ant venom peptidomes via MALDIâ€“TOF mass spectrometry and its application for chemotaxonomy. Journal of Proteomics, 2014, 105, 217-231.	2.4	28
22	Venom toxicity and composition in three Pseudomyrmex ant species having different nesting modes. Toxicon, 2014, 88, 67-76.	1.6	19
23	Efficacy of Australian red-back spider (Latrodectus hasselti) antivenom in the treatment of clinical envenomation by the cupboard spider Steatoda capensis (Theridiidae). Toxicon, 2014, 86, 68-78.	1.6	7
24	Spider Peptides. , 2013, , 461-472.		3
25	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
26	Unravelling the complex venom landscapes of lethal Australian funnel-web spiders (Hexathelidae:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.4	73
27	Characterization of monomeric and multimeric snake neurotoxins and other bioactive proteins from the venom of the lethal Australian common copperhead (Austrelaps superbus). Biochemical Pharmacology, 2013, 85, 1555-1573.	4.4	10
28	Do Vicinal Disulfide Bridges Mediate Functionally Important Redox Transformations in Proteins?. Antioxidants and Redox Signaling, 2013, 19, 1976-1980.	5.4	16
29	Pharmacological characterization of Î±-elapitoxin-Al2a from the venom of the Australian pygmy copperhead (Austrelaps labialis): An atypical long-chain Î±-neurotoxin with only weak affinity for Î±7 nicotinic receptors. Biochemical Pharmacology, 2012, 84, 851-863.	4.4	13
30	Spider-Venom Peptides as Bioinsecticides. Toxins, 2012, 4, 191-227.	3.4	190
31	Cloning and activity of a novel Î±-latrotoxin from red-back spider venom. Biochemical Pharmacology, 2012, 83, 170-183.	4.4	38
32	Spider-venom peptides that target voltage-gated sodium channels: Pharmacological tools and potential therapeutic leads. Toxicon, 2012, 60, 478-491.	1.6	202
33	Identification of presynaptic neurotoxin complexes in the venoms of three Australian copperheads (Austrelaps spp.) and the efficacy of tiger snake antivenom to prevent or reverse neurotoxicity. Toxicon, 2011, 58, 439-452.	1.6	6
34	ArachnoServer 2.0, an updated online resource for spider toxin sequences and structures. Nucleic Acids Research, 2011, 39, D653-D657.	14.5	159
35	Î±-Elapitoxin-Aa2a, a long-chain snake Î±-neurotoxin with potent actions on muscle (Î±1)2Î²Î³Î´ nicotinic receptors, lacks the classical high affinity for neuronal Î±7 nicotinic receptors. Biochemical Pharmacology, 2011, 81, 314-325.	4.4	16
36	Unique scorpion toxin with a putative ancestral fold provides insight into evolution of the inhibitor cystine knot motif. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10478-10483.	7.1	96

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37	A Novel Family of Insect-Selective Peptide Neurotoxins Targeting Insect Large-Conductance Calcium-Activated K⁺ Channels Isolated from the Venom of the Theraphosid Spider Eucratoscelus constrictus. Molecular Pharmacology, 2011, 80, 1-13.	2.3	21
38	Characterisation of the heterotrimeric presynaptic phospholipase A2 neurotoxin complex from the venom of the common death adder (Acanthophis antarcticus). Biochemical Pharmacology, 2010, 80, 277-287.	4.4	22
39	Presence of presynaptic neurotoxin complexes in the venoms of Australo-Papuan death adders (Acanthophis spp.). Toxicon, 2010, 55, 1171-1180.	1.6	9
40	Direct Visualization of Disulfide Bonds through Diselenide Proxies Using ⁷⁷Se NMR Spectroscopy. Angewandte Chemie - International Edition, 2009, 48, 9312-9314.	13.8	63
41	Synthesis, Solution Structure, and Phylum Selectivity of a Spider Î´-Toxin That Slows Inactivation of Specific Voltage-gated Sodium Channel Subtypes. Journal of Biological Chemistry, 2009, 284, 24568-24582.	3.4	32
42	Venomics: unravelling the complexity of animal venoms with mass spectrometry. Journal of Mass Spectrometry, 2008, 43, 279-295.	1.6	138
43	The Janusâ€faced atracotoxins are specific blockers of invertebrate K_{Ca} channels. FEBS Journal, 2008, 275, 4045-4059.	4.7	38
44	A rational nomenclature for naming peptide toxins from spiders and other venomous animals. Toxicon, 2008, 52, 264-276.	1.6	276
45	Intersexual variations in Northern (Missulena pruinosa) and Eastern (M. bradleyi) mouse spider venom. Toxicon, 2008, 51, 1167-1177.	1.6	41
46	Peptide toxins that selectively target insect Na_Vand Ca_Vchannels. Channels, 2008, 2, 100-116.	2.8	95
47	Insect-selective spider toxins targeting voltage-gated sodium channels. Toxicon, 2007, 49, 490-512.	1.6	81
48	Fighting the global pest problem: Preface to the special Toxicon issue on insecticidal toxins and their potential for insect pest control. Toxicon, 2007, 49, 413-422.	1.6	99
49	CSTX-1, a toxin from the venom of the hunting spider Cupiennius salei, is a selective blocker of L-type calcium channels in mammalian neurons. Neuropharmacology, 2007, 52, 1650-1662.	4.1	35
50	The Ï‰-atracotoxins: Selective blockers of insect M-LVA and HVA calcium channels. Biochemical Pharmacology, 2007, 74, 623-638.	4.4	63
51	Arachnid toxinology in Australia: From clinical toxicology to potential applications. Toxicon, 2006, 48, 872-898.	1.6	47
52	Ciguatoxins: Cyclic Polyether Modulators of Voltage-gated Iion Channel Function. Marine Drugs, 2006, 4, 82-118.	4.6	115
53	Spider Venom Peptides. , 2006, , 369-379.		3
54	Block of voltage-gated potassium channels by Pacific ciguatoxin-1 contributes to increased neuronal excitability in rat sensory neurons. Toxicology and Applied Pharmacology, 2005, 204, 175-186.	2.8	75

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55	Spider Neurotoxins Targeting Voltage-Gated Sodium Channels. Toxin Reviews, 2005, 24, 313-343.	3.4	4
56	Discovery of an MIT-like atracotoxin family: Spider venom peptides that share sequence homology but not pharmacological properties with AVIT family proteins. Peptides, 2005, 26, 2412-2426.	2.4	41
57	Neuroprotectant effects of iso-osmolar d-mannitol to prevent Pacific ciguatoxin-1 induced alterations in neuronal excitability: A comparison with other osmotic agents and free radical scavengers. Neuropharmacology, 2005, 49, 669-686.	4.1	33
58	SPider Neurotoxins Targeting Voltage-Gated Sodium Channels. Toxin Reviews, 2005, 24, 315-345.	3.4	7
59	TIME COURSE AND REGIONAL DISTRIBUTION OF CORTICAL CHANGES DURING ACUTE ALCOHOL INGESTION. International Journal of Neuroscience, 2004, 114, 863-878.	1.6	9
60	Structure and function of Î´-atracotoxins: lethal neurotoxins targeting the voltage-gated sodium channel. Toxicon, 2004, 43, 587-599.	1.6	79
61	Synthesis and Characterization of Î´-Atracotoxin-Ar1a, the Lethal Neurotoxin from Venom of the Sydney Funnel-Web Spider (Atrax robustus)â€. Biochemistry, 2003, 42, 12933-12940.	2.5	24
62	Isolation of Î´-missulenatoxin-Mb1a, the major vertebrate-active spider Î´-toxin from the venom ofMissulena bradleyi(Actinopodidae)1. FEBS Letters, 2003, 554, 211-218.	2.8	31
63	Antivenoms for the Treatment of Spider Envenomation. Toxin Reviews, 2003, 22, 35-59.	1.5	11
64	Cross-reactivity of Sydney funnel-web spider antivenom: neutralization of the in vitro toxicity of other Australian funnel-web (Atrax and Hadronyche) spider venoms. Toxicon, 2002, 40, 259-266.	1.6	42
65	Clinical and in vitro evidence for the efficacy of Australian red-back spider (Latrodectus hasselti) antivenom in the treatment of envenomation by a Cupboard spider (Steatoda grossa). Toxicon, 2002, 40, 767-775.	1.6	42
66	Differential blockade of neuronal voltage-gated Na+ and K+ channels by antidepressant drugs. European Journal of Pharmacology, 2002, 452, 35-48.	3.5	41
67	Variations in receptor site-3 on rat brain and insect sodium channels highlighted by binding of a funnel-web spider Î´-atracotoxin. FEBS Journal, 2002, 269, 1500-1510.	0.2	31
68	Spiders of medical importance in the Asia-Pacific: Atracotoxin, latrotoxin and related spider neurotoxins. Clinical and Experimental Pharmacology and Physiology, 2002, 29, 785-794.	1.9	67
69	Discovery and Structure of a Potent and Highly Specific Blocker of Insect Calcium Channels. Journal of Biological Chemistry, 2001, 276, 40306-40312.	3.4	79
70	Red-back spider (Latrodectus hasselti) antivenom prevents the toxicity of widow spider venoms. Annals of Emergency Medicine, 2001, 37, 154-160.	0.6	55
71	Defensin-like peptide-2 from platypus venom: member of a class of peptides with a distinct structural fold. Biochemical Journal, 2000, 348, 649.	3.7	35
72	Scorpion Î± and Î±-like toxins differentially interact with sodium channels in mammalian CNS and periphery. European Journal of Neuroscience, 2000, 12, 2823-2832.	2.6	46

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73	Neurotoxic activity of venom from the Australian Eastern mouse spider (Missulena bradleyi) involves modulation of sodium channel gating. British Journal of Pharmacology, 2000, 130, 1817-1824.	5.4	44
74	Isolation of a funnel-web spider polypeptide with homology to mamba intestinal toxin 1 and the embryonic head inducer Dickkopf-1. Toxicon, 2000, 38, 429-442.	1.6	46
75	Isolation and pharmacological characterisation of Î´-atracotoxin-Hv1b, a vertebrate-selective sodium channel toxin. FEBS Letters, 2000, 470, 293-299.	2.8	56
76	Discovery and characterization of a family of insecticidal neurotoxins with a rare vicinal disulfide bridge. Nature Structural Biology, 2000, 7, 505-513.	9.7	194
77	Spider toxins: A new group of potassium channel modulators. Journal of Computer - Aided Molecular Design, 1999, 15/16, 61-69.	1.0	0
78	Solution structure of a defensin-like peptide from platypus venom. Biochemical Journal, 1999, 341, 785-794.	3.7	57
79	Solution structure of a defensin-like peptide from platypus venom. Biochemical Journal, 1999, 341, 785.	3.7	28
80	Characterisation of the effects of robustoxin, the lethal neurotoxin from the Sydney funnel-web spider Atrax robustus, on sodium channel activation and inactivation. Pflugers Archiv European Journal of Physiology, 1998, 436, 117-126.	2.8	76
81	Î´-Atracotoxins from Australian funnel-web spiders compete with scorpion Î±-toxin binding on both rat brain and insect sodium channels. FEBS Letters, 1998, 439, 246-252.	2.8	61
82	Î´-Atracotoxins from Australian Funnel-web Spiders Compete with Scorpion Î±-Toxin Binding but Differentially Modulate Alkaloid Toxin Activation of Voltage-gated Sodium Channels. Journal of Biological Chemistry, 1998, 273, 27076-27083.	3.4	44
83	Presynaptic snake Î²-neurotoxins produce tetanic fade and endplate potential run-down during neuromuscular blockade in mouse diaphragm. Naunyn-Schmiedeberg's Archives of Pharmacology, 1997, 356, 626-634.	3.0	13
84	Selective alteration of sodium channel gating by Australian funnel-web spider toxins. Toxicon, 1996, 34, 1443-1453.	1.6	53
85	Modification of sodium channel gating and kinetics by versutoxin from the Australian funnel-web spiderHadronyche versuta. Pflugers Archiv European Journal of Physiology, 1994, 428, 400-409.	2.8	73
86	Frequency-dependent neuromuscular blockade by textilotoxin in vivo. Toxicon, 1991, 29, 1266-1269.	1.6	5
87	Calcium-dependent actions of the convulsant barbiturate, CHEB, on transmitter release at the rat neuromuscular junction. General Pharmacology, 1990, 21, 741-746.	0.7	2
88	Differing actions of convulsant and nonconvulsant barbiturates: An electrophysiological study in the isolated spinal cord of the rat. Neuropharmacology, 1988, 27, 459-465.	4.1	10
89	Depolarizing actions of convulsant barbiturates on isolated rat dorsal root ganglion cells. Neuroscience Letters, 1988, 93, 330-335.	2.1	7
90	Effects of a depressant/convulsant pair of glutarimides on neuronal activity in the isolated spinal cord of the immature rat. Neuropharmacology, 1985, 24, 461-464.	4.1	4

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91	Strychnine-like action of the convulsant barbiturate, CHEB. Neuropharmacology, 1985, 24, 465-471.	4.1	3
92	Actions of pentobarbitone and derivatives with modified 5-butyl substituents on GABA and diazepam binding to rat brain synaptosomal membranes. Neurochemical Research, 1983, 8, 1337-1350.	3.3	16
93	Insulin Trafficking in a Glucose Responsive Engineered Human Liver Cell Line is Regulated by the Interaction of ATP-Sensitive Potassium Channels and Voltage-Gated Calcium Channels. , 0, , .		0