Ke Dong

List of Publications by Year
in descending order

85 papers	4,072 citations	136950 32 h-index	123424 61 g-index
85 all docs	85 docs citations	85 times ranked	2827 citing authors

#	Article	IF	Citations
1	Molecular biology of insect sodium channels and pyrethroid resistance. Insect Biochemistry and Molecular Biology, 2014, 50, 1-17.	2.7	361
2	Insect sodium channels and insecticide resistance. Invertebrate Neuroscience, 2007, 7, 17-30.	1.8	280
3	Diversity and convergence of sodium channel mutations involved in resistance to pyrethroids. Pesticide Biochemistry and Physiology, 2013, 106, 93-100.	3.6	235
4	Molecular evidence for dual pyrethroid-receptor sites on a mosquito sodium channel. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11785-11790.	7.1	223
5	Use of non-mammalian alternative models for neurotoxicological study. NeuroToxicology, 2008, 29, 546-555.	3.0	154
6	Detection of a new pyrethroid resistance mutation (V410L) in the sodium channel of Aedes aegypti: a potential challenge for mosquito control. Scientific Reports, 2017, 7, 46549.	3.3	146
7	Alternative Splicing of an Insect Sodium Channel Gene Generates Pharmacologically Distinct Sodium Channels. Journal of Neuroscience, 2002, 22, 5300-5309.	3.6	139
8	The insecticidal potential of scorpion Î²-toxins. Toxicon, 2007, 49, 473-489.	1.6	124
9	Identification of Amino Acid Residues in the Insect Sodium Channel Critical for Pyrethroid Binding. Molecular Pharmacology, 2005, 67, 513-522.	2.3	120
10	The differential preference of scorpion Î±-toxins for insect or mammalian sodium channels: Implications for improved insect control. Toxicon, 2007, 49, 452-472.	1.6	109
11	Sodium Channel Mutations and Pyrethroid Resistance in Aedes aegypti. Insects, 2016, 7, 60.	2.2	105
12	Voltage-Gated Sodium Channels as Insecticide Targets. Advances in Insect Physiology, 2014, 46, 389-433.	2.7	100
13	RNA Editing Generates Tissue-specific Sodium Channels with Distinct Gating Properties. Journal of Biological Chemistry, 2004, 279, 32554-32561.	3.4	95
14	Linkage of kdr-Type resistance and the para-Homologous sodium channel gene in German cockroaches (Blattella germanica). Insect Biochemistry and Molecular Biology, 1994, 24, 647-654.	2.7	86
15	A sodium channel mutation identified in Aedes aegypti selectively reduces cockroach sodium channel sensitivity to type I, but not type II pyrethroids. Insect Biochemistry and Molecular Biology, 2011, 41, 9-13.	2.7	78
16	A Voltage-Gated Calcium-Selective Channel Encoded by a Sodium Channel-like Gene. Neuron, 2004, 42, 101-112.	8.1	67
17	Novel point mutations in the German cockroach para sodium channel gene are associated with knockdown resistance (kdr) to pyrethroid insecticides. Insect Biochemistry and Molecular Biology, 2000, 30, 991-997.	2.7	66
18	Molecular and functional characterization of voltage-gated sodium channel variants from Drosophila melanogaster. Insect Biochemistry and Molecular Biology, 2008, 38, 604-610.	2.7	66

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19	Two novel sodium channel mutations associated with resistance to indoxacarb and metaflumizone in the diamondback moth, <i>Plutella xylostella</i>. Insect Science, 2016, 23, 50-58.	3.0	62
20	Association of novel mutations in a sodium channel gene with fluvalinate resistance in the mite,<i>Varroa destructor</i>. Journal of Apicultural Research, 2002, 41, 17-25.	1.5	59
21	Identification of New Batrachotoxin-sensing Residues in Segment IIIS6 of the Sodium Channel. Journal of Biological Chemistry, 2011, 286, 13151-13160.	3.4	57
22	The Knockdown Resistance (kdr) Mutation in Pyrethroid-Resistant German Cockroaches. Pesticide Biochemistry and Physiology, 1998, 60, 195-204.	3.6	52
23	Persistent tetrodotoxin-sensitive sodium current resulting from U-to-C RNA editing of an insect sodium channel. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 11862-11867.	7.1	52
24	Mechanism of action of sodium channel blocker insecticides (SCBIs) on insect sodium channels. Pesticide Biochemistry and Physiology, 2010, 97, 87-92.	3.6	52
25	Molecular evidence of sequential evolution of DDT- and pyrethroid-resistant sodium channel in Aedes aegypti. PLoS Neglected Tropical Diseases, 2019, 13, e0007432.	3.0	49
26	Molecular characterization of an arachnid sodium channel gene from the varroa mite (Varroa) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	2.7	47
27	Identification of a cluster of residues in transmembrane segment 6 of domain III of the cockroach sodium channel essential for the action of pyrethroid insecticides. Biochemical Journal, 2009, 419, 377-385.	3.7	41
28	Molecular basis of differential sensitivity of insect sodium channels to DCJW, a bioactive metabolite of the oxadiazine insecticide indoxacarb. NeuroToxicology, 2006, 27, 237-244.	3.0	40
29	Elucidation of pyrethroid and DDT receptor sites in the voltage-gated sodium channel. NeuroToxicology, 2017, 60, 171-177.	3.0	36
30	A Mutation in the Intracellular Loop III/IV of Mosquito Sodium Channel Synergizes the Effect of Mutations in Helix IIS6 on Pyrethroid Resistance. Molecular Pharmacology, 2015, 87, 421-429.	2.3	35
31	Block of Kir channels by flonicamid disrupts salivary and renal excretion of insect pests. Insect Biochemistry and Molecular Biology, 2018, 99, 17-26.	2.7	35
32	Molecular determinants on the insect sodium channel for the specific action of type II pyrethroid insecticides. Toxicology and Applied Pharmacology, 2009, 234, 266-272.	2.8	34
33	Molecular characterization and functional expression of the DSC1 channel. Insect Biochemistry and Molecular Biology, 2011, 41, 451-458.	2.7	33
34	Multiple mutations and mutation combinations in the sodium channel of permethrin resistant mosquitoes, Culex quinquefasciatus. Scientific Reports, 2012, 2, 781.	3.3	33
35	Molecular basis of selective resistance of the bumblebee BiNa_v1 sodium channel to tau-fluvalinate. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12922-12927.	7.1	33
36	A dual-target molecular mechanism of pyrethrum repellency against mosquitoes. Nature Communications, 2021, 12, 2553.	12.8	31

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37	Rotational Symmetry of Two Pyrethroid Receptor Sites in the Mosquito Sodium Channel. Molecular Pharmacology, 2015, 88, 273-280.	2.3	29
38	Alternative splicing of the BSC1 gene generates tissue-specific isoforms in the German cockroach. Insect Biochemistry and Molecular Biology, 2001, 31, 703-713.	2.7	28
39	Functional Expression of an Arachnid Sodium Channel Reveals Residues Responsible for Tetrodotoxin Resistance in Invertebrate Sodium Channels. Journal of Biological Chemistry, 2009, 284, 33869-33875.	3.4	28
40	Chronology of sodium channel mutations associated with pyrethroid resistance in <i>Aedes aegypti</i>. Archives of Insect Biochemistry and Physiology, 2020, 104, e21686.	1.5	28
41	Synergistic interaction between two cockroach sodium channel mutations and a tobacco budworm sodium channel mutation in reducing channel sensitivity to a pyrethroid insecticide. Insect Biochemistry and Molecular Biology, 2002, 32, 397-404.	2.7	26
42	A residue in the transmembrane segment 6 of domain I in insect and mammalian sodium channels regulate differential sensitivities to pyrethroid insecticides. NeuroToxicology, 2013, 38, 42-50.	3.0	26
43	The Receptor Site and Mechanism of Action of Sodium Channel Blocker Insecticides. Journal of Biological Chemistry, 2016, 291, 20113-20124.	3.4	26
44	Molecular Mechanism of Action and Selectivity of Sodium Ch annel Blocker Insecticides. Current Medicinal Chemistry, 2017, 24, 2912-2924.	2.4	26
45	Action of six pyrethrins purified from the botanical insecticide pyrethrum on cockroach sodium channels expressed in Xenopus oocytes. Pesticide Biochemistry and Physiology, 2018, 151, 82-89.	3.6	25
46	Evolutionary Adaptation of the Amino Acid and Codon Usage of the Mosquito Sodium Channel following Insecticide Selection in the Field Mosquitoes. PLoS ONE, 2012, 7, e47609.	2.5	24
47	Role of the DSC1 Channel in Regulating Neuronal Excitability in Drosophila melanogaster: Extending Nervous System Stability under Stress. PLoS Genetics, 2013, 9, e1003327.	3.5	24
48	Evidence for Dual Binding Sites for 1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane (DDT) in Insect Sodium Channels. Journal of Biological Chemistry, 2016, 291, 4638-4648.	3.4	24
49	Effect of a fluvalinate-resistance-associated sodium channel mutation from varroa mites on cockroach sodium channel sensitivity to fluvalinate, a pyrethroid insecticide. Insect Biochemistry and Molecular Biology, 2006, 36, 885-889.	2.7	23
50	Substitutions in the Domain III Voltage-sensing Module Enhance the Sensitivity of an Insect Sodium Channel to a Scorpion Î²-Toxin. Journal of Biological Chemistry, 2011, 286, 15781-15788.	3.4	22
51	Behavioral and physiological responses of <scp><i>Drosophila melanogaster</i></scp> and <i>D. suzukii</i> to volatiles from plant essential oils. Pest Management Science, 2021, 77, 3698-3705.	3.4	22
52	A negative charge in transmembrane segment 1 of domain II of the cockroach sodium channel is critical for channel gating and action of pyrethroid insecticides. Toxicology and Applied Pharmacology, 2010, 247, 53-59.	2.8	21
53	Role of the sixth transmembrane segment of domain IV of the cockroach sodium channel in the action of sodium channel blocker insecticides. NeuroToxicology, 2009, 30, 613-621.	3.0	20
54	Molecular characterization of a sodium channel gene from the Silkworm Bombyx mori. Insect Biochemistry and Molecular Biology, 2009, 39, 145-151.	2.7	19

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55	Analysis of the action of lidocaine on insect sodium channels. Insect Biochemistry and Molecular Biology, 2011, 41, 36-41.	2.7	19
56	Distinct roles of the DmNav and DSC1 channels in the action of DDT and pyrethroids. NeuroToxicology, 2015, 47, 99-106.	3.0	19
57	Mutations in the transmembrane helix S6 of domain IV confer cockroach sodium channel resistance to sodium channel blocker insecticides and local anesthetics. Insect Biochemistry and Molecular Biology, 2015, 66, 88-95.	2.7	19
58	An alanine in segment 3 of domain III (IIIS3) of the cockroach sodium channel contributes to the low pyrethroid sensitivity of an alternative splice variant. Insect Biochemistry and Molecular Biology, 2006, 36, 161-168.	2.7	17
59	Sodium channel activation underlies transfluthrin repellency in Aedes aegypti. PLoS Neglected Tropical Diseases, 2021, 15, e0009546.	3.0	17
60	Molecular characterization of DSC1 orthologs in invertebrate species. Insect Biochemistry and Molecular Biology, 2012, 42, 353-359.	2.7	16
61	Insight into the Mode of Action of Haedoxan A from Phryma leptostachya. Toxins, 2016, 8, 53.	3.4	14
62	Differential Effects of TipE and a TipE-Homologous Protein on Modulation of Gating Properties of Sodium Channels from Drosophila melanogaster. PLoS ONE, 2013, 8, e67551.	2.5	13
63	Batrachotoxin, Pyrethroids, and BTG 502 Share Overlapping Binding Sites on Insect Sodium Channels. Molecular Pharmacology, 2011, 80, 426-433.	2.3	12
64	Distinct roles of two RDL GABA receptors in fipronil action in the diamondback moth (<i>Plutella) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.0	12
65	Mutations of two acidic residues at the cytoplasmic end of segment IIIS6 of an insect sodium channel have distinct effects on pyrethroid resistance. Insect Biochemistry and Molecular Biology, 2017, 82, 1-10.	2.7	11
66	Alanine to valine substitutions in the pore helix IIIP1 and linker-helix IIIL45 confer cockroach sodium channel resistance to DDT and pyrethroids. NeuroToxicology, 2017, 60, 197-206.	3.0	11
67	Pyrethrins elicit olfactory response and spatial repellency in <scp><i>Aedes albopictus</i></scp>. Pest Management Science, 2021, 77, 3706-3712.	3.4	11
68	An important role of a pyrethroid-sensing residue F1519 in the action of the N-alkylamide insecticide BTG 502 on the cockroach sodium channel. Insect Biochemistry and Molecular Biology, 2011, 41, 446-450.	2.7	10
69	Intron Retention in mRNA Encoding Ancillary Subunit of Insect Voltage-Gated Sodium Channel Modulates Channel Expression, Gating Regulation and Drug Sensitivity. PLoS ONE, 2013, 8, e67290.	2.5	10
70	Discovery of a Novel Series of Tricyclic Oxadiazine 4a-Methyl Esters Based on Indoxacarb as Potential Sodium Channel Blocker/Modulator Insecticides. Journal of Agricultural and Food Chemistry, 2019, 67, 7793-7809.	5.2	10
71	Identification of multiple odorant receptors essential for pyrethrum repellency in Drosophila melanogaster. PLoS Genetics, 2021, 17, e1009677.	3.5	10
72	The Drosophila Sodium Channel 1 (DSC1): The founding member of a new family of voltage-gated cation channels. Pesticide Biochemistry and Physiology, 2015, 120, 36-39.	3.6	8

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73	Three sodium channel mutations from Aedes albopictus confer resistance to Type I, but not Type II pyrethroids. Insect Biochemistry and Molecular Biology, 2020, 123, 103411.	2.7	8
74	Mapping the interaction surface of scorpion Î²-toxins with an insect sodium channel. Biochemical Journal, 2021, 478, 2843-2869.	3.7	7
75	Bioallethrin activates specific olfactory sensory neurons and elicits spatial repellency in <scp><i>Aedes aegypti</i></scp>. Pest Management Science, 2022, 78, 438-445.	3.4	7
76	Distinct modulating effects of TipE-homologs 2â€“4 on Drosophila sodium channel splice variants. Insect Biochemistry and Molecular Biology, 2015, 60, 24-32.	2.7	6
77	Mutational analysis of state-dependent contacts in the pore module of eukaryotic sodium channels. Archives of Biochemistry and Biophysics, 2018, 652, 59-70.	3.0	6
78	DSC1 channel-dependent developmental regulation of pyrethroid susceptibility in Drosophila melanogaster. Pesticide Biochemistry and Physiology, 2018, 148, 190-198.	3.6	6
79	Distinct functional properties of sodium channel variants are associated with usage of alternative exons in Nilaparvata lugens. Insect Biochemistry and Molecular Biology, 2020, 118, 103292.	2.7	6
80	Voltage-Gated Sodium Channels as Insecticide Targets. , 0, , 167-176.		3
81	Sequence variations at I260 and A1731 contribute to persistent currents in Drosophila sodium channels. Neuroscience, 2014, 268, 297-308.	2.3	3
82	Molecular and functional characterization of a novel sodium channel TipE-like auxiliary subunit from the American cockroach Periplaneta americana. Insect Biochemistry and Molecular Biology, 2015, 66, 136-144.	2.7	2
83	Charge substitutions at the voltage-sensing module of domain III enhance actions of site-3 and site-4 toxins on an insect sodium channel. Insect Biochemistry and Molecular Biology, 2021, 137, 103625.	2.7	2
84	Negative crossâ€resistance of a pyrethroidâ€resistant Drosophila mutant to Phryma leptostachya â€derived haedoxan A. Insect Science, 2021, , .	3.0	1
85	Bemisia tabaci (Gennadius)â€™de Ä°ki Nikotinik Asetilkolin ReseptÃ¶r Genin KlonlanmasÄ±. Turkish Journal of Agriculture: Food Science and Technology, 2020, 8, 2322-2329.	0.3	0