

Zhijian Cao

List of Publications by Year in descending order

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117
papers

3,454
citations

117453

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182168

51
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117
all docs

117
docs citations

117
times ranked

3061
citing authors

#	ARTICLE	IF	CITATIONS
1	p38 activation and viral infection. <i>Expert Reviews in Molecular Medicine</i> , 2022, 24, e4.	1.6	9
2	Angiotensin II Type I Receptor (AT1R): The Gate towards COVID-19-Associated Diseases. <i>Molecules</i> , 2022, 27, 2048.	1.7	38
3	Identification of an arthropod molecular target for plant-derived natural repellents. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2118152119.	3.3	5
4	The Pathophysiology of Long COVID throughout the Renin-Angiotensin System. <i>Molecules</i> , 2022, 27, 2903.	1.7	44
5	Highly biocompatible and recyclable biomimetic nanoparticles for antibiotic-resistant bacteria infection. <i>Biomaterials Science</i> , 2021, 9, 826-834.	2.6	28
6	Capivasertib restricts SARS-CoV-2 cellular entry: a potential clinical application for COVID-19. <i>International Journal of Biological Sciences</i> , 2021, 17, 2348-2355.	2.6	31
7	Different pharmacological properties between scorpion toxin BmKcug2 and its degraded analogs highlight the diversity of K ⁺ channel blockers from thermally processed scorpions. <i>International Journal of Biological Macromolecules</i> , 2021, 178, 143-153.	3.6	3
8	Scorpion Toxin-potassium Channel Interaction Law and its Applications. <i>Venoms and Toxins</i> , 2021, 1, 15-26.	0.3	1
9	Editorial: Venoms, Animal and Microbial Toxins. <i>Frontiers in Pharmacology</i> , 2021, 12, 706573.	1.6	0
10	Tick peptides evoke itch by activating MrgprC11/MRGPRX1 to sensitize TRPV1 in pruriceptors. <i>Journal of Allergy and Clinical Immunology</i> , 2021, 147, 2236-2248.e16.	1.5	25
11	Molecular Cloning and Functional Identification of the Antimicrobial Peptide Gene Ctri9594 from the Venom of the Scorpion <i>Chaerilus tricostatus</i> . <i>Antibiotics</i> , 2021, 10, 896.	1.5	3
12	BmK86-P1, a New Degradation Peptide with Desirable Thermostability and Kv1.2 Channel-Specific Activity from Traditional Chinese Scorpion Medicinal Material. <i>Toxins</i> , 2021, 13, 610.	1.5	4
13	The rapid development of the first instar telson with venom secretion highlights the remarkable survival ability of scorpions. <i>Toxicon</i> , 2021, 200, 198-202.	0.8	2
14	Counter-Regulatory Renin-Angiotensin System: An Important Line of Research to Understand and Limit the Severity of COVID-19. <i>Infectious Disorders - Drug Targets</i> , 2021, 21, .	0.4	9
15	ML-SA1 and SN-2 inhibit endocytosed viruses through regulating TRPML channel expression and activity. <i>Antiviral Research</i> , 2021, 195, 105193.	1.9	7
16	The Kv1.3 ion channel acts as a host factor restricting viral entry. <i>FASEB Journal</i> , 2021, 35, e20995.	0.2	0
17	The Renin-Angiotensin System: A Key Role in SARS-CoV-2-Induced COVID-19. <i>Molecules</i> , 2021, 26, 6945.	1.7	41
18	ImKTx96, a peptide blocker of the Kv1.2 ion channel from the venom of the scorpion <i>Isometrus maculatus</i> . <i>Peptides</i> , 2020, 123, 170172.	1.2	1

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19	Purisin, a toxin-like defensin derived from clinical pathogenic fungus <i>Purpureocillium lilacinum</i> with both antimicrobial and potassium channel inhibitory activities. <i>FASEB Journal</i> , 2020, 34, 15093-15107.	0.2	5
20	Virus-induced p38 MAPK activation facilitates viral infection. <i>Theranostics</i> , 2020, 10, 12223-12240.	4.6	65
21	Pharmacological Effects of a Novel Bradykinin-Related Peptide (RR-18) from the Skin Secretion of the Hejiang Frog (<i>Ordorana hejiangensis</i>) on Smooth Muscle. <i>Biomedicines</i> , 2020, 8, 225.	1.4	3
22	ML-SA1, a selective TRPML agonist, inhibits DENV2 and ZIKV by promoting lysosomal acidification and protease activity. <i>Antiviral Research</i> , 2020, 182, 104922.	1.9	24
23	Counter-regulatory Renin-Angiotensin System-based Candidate Drugs to Treat COVID-19 Diseases in SARS-CoV-2-infected Patients. <i>Infectious Disorders - Drug Targets</i> , 2020, 20, 407-408.	0.4	49
24	SARS-CoV-2 & Covid-19: Key-Roles of the Renin-Angiotensin System / Vitamin D Impacting Drug and Vaccine Developments. <i>Infectious Disorders - Drug Targets</i> , 2020, 20, 348-349.	0.4	31
25	Point of view: Should COVID-19 patients be supplemented with vitamin D?. <i>Maturitas</i> , 2020, 140, 24-26.	1.0	33
26	Topology, Antiviral Functional Residues and Mechanism of IFITM1. <i>Viruses</i> , 2020, 12, 295.	1.5	12
27	Neurological, Cognitive, and Behavioral Disorders during COVID-19: The Nitric Oxide Track. <i>Journal of the American Geriatrics Society</i> , 2020, 68, 1922-1923.	1.3	9
28	Ion channel modulation by scorpion hemolymph and its defensin ingredients highlights origin of neurotoxins in telson formed in Paleozoic scorpions. <i>International Journal of Biological Macromolecules</i> , 2020, 148, 351-363.	3.6	6
29	Inhibitory Activity of a Scorpion Defensin BmKDFsin3 against Hepatitis C Virus. <i>Antibiotics</i> , 2020, 9, 33.	1.5	22
30	Thermostable potassium channel-inhibiting neurotoxins in processed scorpion medicinal material revealed by proteomic analysis: Implications of its pharmaceutical basis in traditional Chinese medicine. <i>Journal of Proteomics</i> , 2019, 206, 103435.	1.2	10
31	Diverse Structural Features of Potassium Channels Characterized by Scorpion Toxins as Molecular Probes. <i>Molecules</i> , 2019, 24, 2045.	1.7	22
32	A scorpion venom peptide Ev37 restricts viral late entry by alkalizing acidic organelles. <i>Journal of Biological Chemistry</i> , 2019, 294, 182-194.	1.6	31
33	Defensins, a novel type of animal toxin-like potassium channel inhibitor. <i>Toxicon</i> , 2019, 157, 101-105.	0.8	11
34	Expression of recombinant δ -toxin BmKM9 from scorpion <i>Buthus martensii</i> Karsch and its functional characterization on sodium channels. <i>Peptides</i> , 2018, 99, 153-160.	1.2	16
35	The Scorpion Venom Peptide Smp76 Inhibits Viral Infection by Regulating Type-I Interferon Response. <i>Virologica Sinica</i> , 2018, 33, 545-556.	1.2	24
36	Therapeutic Potential of a Scorpion Venom-Derived Antimicrobial Peptide and Its Homologs Against Antibiotic-Resistant Gram-Positive Bacteria. <i>Frontiers in Microbiology</i> , 2018, 9, 1159.	1.5	34

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37	Mouse \hat{I}^2 -Defensin 3, A Defensin Inhibitor of Both Its Endogenous and Exogenous Potassium Channels. <i>Molecules</i> , 2018, 23, 1489.	1.7	5
38	Triintsin, a human pathogenic fungus-derived defensin with broad-spectrum antimicrobial activity. <i>Peptides</i> , 2018, 107, 61-67.	1.2	5
39	Histidine-rich Modification of a Scorpion-derived Peptide Improves Bioavailability and Inhibitory Activity against HSV-1. <i>Theranostics</i> , 2018, 8, 199-211.	4.6	30
40	Pharmacological characterization of human beta-defensins 3 and 4 on potassium channels: Evidence of diversity in beta-defensin-potassium channel interactions. <i>Peptides</i> , 2018, 108, 14-18.	1.2	6
41	St20, a new venomous animal derived natural peptide with immunosuppressive and anti-inflammatory activities. <i>Toxicon</i> , 2017, 127, 37-43.	0.8	10
42	Discovery of three toxin peptides with Kv1.3 channel and IL-2 cytokine-inhibiting activities from Non-Buthidae scorpions, <i>Chaerilus tricostratus</i> and <i>Chaerilus tryznai</i> . <i>Peptides</i> , 2017, 91, 13-19.	1.2	6
43	Molecular characterization and expression analysis of CS \hat{I}^2 defensin genes from the scorpion <i>Mesobuthus martensii</i> . <i>Bioscience Reports</i> , 2017, 37, .	1.1	6
44	Treating autoimmune disorders with venom-derived peptides. <i>Expert Opinion on Biological Therapy</i> , 2017, 17, 1065-1075.	1.4	40
45	The Scorpion Toxin Analogue BmKTX-D33H as a Potential Kv1.3 Channel-Selective Immunomodulator for Autoimmune Diseases. <i>Toxins</i> , 2016, 8, 115.	1.5	20
46	A Scorpion Defensin BmKDFsin4 Inhibits Hepatitis B Virus Replication in Vitro. <i>Toxins</i> , 2016, 8, 124.	1.5	25
47	Molecular basis for the toxin insensitivity of scorpion voltage-gated potassium channel MmKv1. <i>Biochemical Journal</i> , 2016, 473, 1257-1266.	1.7	5
48	Identification of two novel Chlorotoxin derivatives CA4 and CTX-23 with chemotherapeutic and anti-angiogenic potential. <i>Scientific Reports</i> , 2016, 6, 19799.	1.6	22
49	K1K8: an Hp1404-derived antibacterial peptide. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 5069-5077.	1.7	11
50	A Tat-conjugated Peptide Nucleic Acid Tat-PNA-DR Inhibits Hepatitis B Virus Replication In Vitro and In Vivo by Targeting LTR Direct Repeats of HBV RNA. <i>Molecular Therapy - Nucleic Acids</i> , 2016, 5, e295.	2.3	37
51	Human beta-defensin 1, a new animal toxin-like blocker of potassium channel. <i>Toxicon</i> , 2016, 113, 1-6.	0.8	9
52	Scorpion Potassium Channel-blocking Defensin Highlights a Functional Link with Neurotoxin. <i>Journal of Biological Chemistry</i> , 2016, 291, 7097-7106.	1.6	42
53	Toxin acidic residue evolutionary function-guided design of de novo peptide drugs for the immunotherapeutic target, the Kv1.3 channel. <i>Scientific Reports</i> , 2015, 5, 9881.	1.6	26
54	A single conserved basic residue in the potassium channel filter region controls KCNQ1 insensitivity toward scorpion toxins. <i>Biochemistry and Biophysics Reports</i> , 2015, 3, 62-67.	0.7	1

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55	Plectasin, First Animal Toxin-Like Fungal Defensin Blocking Potassium Channels through Recognizing Channel Pore Region. <i>Toxins</i> , 2015, 7, 34-42.	1.5	27
56	SjAPI-2 is the first member of a new neurotoxin family with Ascaris-type fold and KCNQ1 inhibitory activity. <i>International Journal of Biological Macromolecules</i> , 2015, 79, 504-510.	3.6	11
57	Human β -defensins are immune-related Kv1.3 channel inhibitors: new support for their roles in adaptive immunity. <i>FASEB Journal</i> , 2015, 29, 4324-4333.	0.2	23
58	Kv Channel S1-S2 Linker Working as a Binding Site of Human β 2-Defensin 2 for Channel Activation Modulation. <i>Journal of Biological Chemistry</i> , 2015, 290, 15487-15495.	1.6	15
59	Genome-wide analysis of homeobox genes from <i>Mesobuthus martensii</i> reveals Hox gene duplication in scorpions. <i>Insect Biochemistry and Molecular Biology</i> , 2015, 61, 25-33.	1.2	25
60	A p7 Ion Channel-derived Peptide Inhibits Hepatitis C Virus Infection in Vitro. <i>Journal of Biological Chemistry</i> , 2015, 290, 23254-23263.	1.6	5
61	A new Kunitz-type plasmin inhibitor from scorpion venom. <i>Toxicon</i> , 2015, 106, 7-13.	0.8	13
62	Neurotoxin-directed synthesis and in vitro evaluation of Au nanoclusters. <i>RSC Advances</i> , 2015, 5, 29647-29652.	1.7	1
63	Engineering a peptide inhibitor towards the KCNQ1/KCNE1 potassium channel (IKs). <i>Peptides</i> , 2015, 71, 77-83.	1.2	9
64	Endogenous animal toxin-like human β 2-defensin 2 inhibits own K ⁺ channels through interaction with channel extracellular pore region. <i>Cellular and Molecular Life Sciences</i> , 2015, 72, 845-853.	2.4	34
65	Functional characterization of a new non-Kunitz serine protease inhibitor from the scorpion <i>Lychas mucronatus</i> . <i>International Journal of Biological Macromolecules</i> , 2015, 72, 158-162.	3.6	14
66	Functional characterization of two novel scorpion sodium channel toxins from <i>Lychas mucronatus</i> . <i>Toxicon</i> , 2014, 90, 318-325.	0.8	7
67	Overview of Scorpion Species from China and Their Toxins. <i>Toxins</i> , 2014, 6, 796-815.	1.5	31
68	Unusual binding mode of scorpion toxin BmKTX onto potassium channels relies on its distribution of acidic residues. <i>Biochemical and Biophysical Research Communications</i> , 2014, 447, 70-76.	1.0	32
69	Proteomic analysis of the venom from the scorpion <i>Mesobuthus martensii</i> . <i>Journal of Proteomics</i> , 2014, 106, 162-180.	1.2	43
70	Inhibitory activity and mechanism of two scorpion venom peptides against herpes simplex virus type 1. <i>Antiviral Research</i> , 2014, 102, 1-10.	1.9	53
71	BF9, the First Functionally Characterized Snake Toxin Peptide with Kunitz-Type Protease and Potassium Channel Inhibiting Properties. <i>Journal of Biochemical and Molecular Toxicology</i> , 2014, 28, 76-83.	1.4	32
72	Sj7170, a Unique Dual-function Peptide with a Specific β -Chymotrypsin Inhibitory Activity and a Potent Tumor-activating Effect from Scorpion Venom. <i>Journal of Biological Chemistry</i> , 2014, 289, 11667-11680.	1.6	10

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73	Kv1.3 potassium channel-blocking toxin Ctri9577, novel gating modifier of Kv4.3 potassium channel from the scorpion toxin family. <i>Biochemical and Biophysical Research Communications</i> , 2014, 444, 406-410.	1.0	11
74	Hp1404, a New Antimicrobial Peptide from the Scorpion <i>Heterometrus petersii</i> . <i>PLoS ONE</i> , 2014, 9, e97539.	1.1	27
75	Expression and characterization of a novel scorpine-like peptide Ev37, from the scorpion <i>Euscorpiops validus</i> . <i>Protein Expression and Purification</i> , 2013, 88, 127-133.	0.6	18
76	Design of histidine-rich peptides with enhanced bioavailability and inhibitory activity against hepatitis C virus. <i>Biomaterials</i> , 2013, 34, 3511-3522.	5.7	36
77	Fusion expression and purification of four disulfide-rich peptides reveals enterokinase secondary cleavage sites in animal toxins. <i>Peptides</i> , 2013, 39, 145-151.	1.2	14
78	Cloning and characterization of a novel Kunitz-type inhibitor from scorpion with unique cysteine framework. <i>Toxicon</i> , 2013, 72, 5-10.	0.8	17
79	Molecular diversity of Chaerilidae venom peptides reveals the dynamic evolution of scorpion venom components from Buthidae to non-Buthidae. <i>Journal of Proteomics</i> , 2013, 89, 1-14.	1.2	59
80	The genome of <i>Mesobuthus martensii</i> reveals a unique adaptation model of arthropods. <i>Nature Communications</i> , 2013, 4, 2602.	5.8	187
81	Notes on the scorpions (Arachnida, Scorpiones) from Xizang with the redescription of <i>Scorpiops jendeki</i> Kováčik, 2000 (Scorpiones, Euscorpiidae) from Yunnan (China). <i>ZooKeys</i> , 2013, 301, 51-99.	0.5	10
82	Two Conserved Arginine Residues from the SK3 Potassium Channel Outer Vestibule Control Selectivity of Recognition by Scorpion Toxins. <i>Journal of Biological Chemistry</i> , 2013, 288, 12544-12553.	1.6	26
83	SjAPI, the First Functionally Characterized Ascaris-Type Protease Inhibitor from Animal Venoms. <i>PLoS ONE</i> , 2013, 8, e57529.	1.1	35
84	Mucroporin-M1 Inhibits Hepatitis B Virus Replication by Activating the Mitogen-activated Protein Kinase (MAPK) Pathway and Down-regulating HNF4 α in Vitro and in Vivo*. <i>Journal of Biological Chemistry</i> , 2012, 287, 30181-30190.	1.6	57
85	Recombinant expression, purification, and characterization of scorpion toxin BmTx14. <i>Protein Expression and Purification</i> , 2012, 82, 325-331.	0.6	14
86	Identification of a new specific Kv1.3 channel blocker, Ctri9577, from the scorpion <i>Chaerilus tricostatus</i> . <i>Peptides</i> , 2012, 36, 94-99.	1.2	13
87	StCT2, a new antibacterial peptide characterized from the venom of the scorpion <i>Scorpiops tibetanus</i> . <i>Peptides</i> , 2012, 36, 213-220.	1.2	54
88	Extreme diversity of scorpion venom peptides and proteins revealed by transcriptomic analysis: Implication for proteome evolution of scorpion venom arsenal. <i>Journal of Proteomics</i> , 2012, 75, 1563-1576.	1.2	96
89	Anti-HIV-1 Activity of a New Scorpion Venom Peptide Derivative Kn2-7. <i>PLoS ONE</i> , 2012, 7, e34947.	1.1	59
90	Antibacterial Activity and Mechanism of a Scorpion Venom Peptide Derivative In Vitro and In Vivo. <i>PLoS ONE</i> , 2012, 7, e40135.	1.1	79

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91	ImKTx88, a novel selective Kv1.3 channel blocker derived from the scorpion <i>Isometrus maculatus</i> . <i>Toxicol</i> , 2011, 57, 348-355.	0.8	24
92	Ctriporin, a New Anti-Methicillin-Resistant <i>Staphylococcus aureus</i> Peptide from the Venom of the Scorpion <i>Chaerilus tricostatus</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 5220-5229.	1.4	57
93	A new natural α -helical peptide from the venom of the scorpion <i>Heterometrus petersii</i> kills HCV. <i>Peptides</i> , 2011, 32, 11-19.	1.2	68
94	Virucidal activity of a scorpion venom peptide variant mucroporin-M1 against measles, SARS-CoV and influenza H5N1 viruses. <i>Peptides</i> , 2011, 32, 1518-1525.	1.2	113
95	Synthesis of Highly Luminescent and Anion-Exchangeable Cerium-Doped Layered Yttrium Hydroxides for Sensing and Photofunctional Applications. <i>Advanced Functional Materials</i> , 2011, 21, 4388-4396.	7.8	65
96	ImKTx1, a new Kv1.3 channel blocker with a unique primary structure. <i>Journal of Biochemical and Molecular Toxicology</i> , 2011, 25, 244-251.	1.4	25
97	SdPI, The First Functionally Characterized Kunitz-Type Trypsin Inhibitor from Scorpion Venom. <i>PLoS ONE</i> , 2011, 6, e27548.	1.1	53
98	The scorpions of Yunnan (China): updated identification key, new record, and distributions (Arachnida: Scorpiones). <i>ZooKeys</i> , 2011, 82, 1-33.	0.5	11
99	Neurotoxin-conjugated upconversion nanoprobe for direct visualization of tumors under near-infrared irradiation. <i>Biomaterials</i> , 2010, 31, 8724-8731.	5.7	109
100	Molecular diversity of toxic components from the scorpion <i>Heterometrus petersii</i> venom revealed by proteomic and transcriptome analysis. <i>Proteomics</i> , 2010, 10, 2471-2485.	1.3	89
101	Protein-Protein Recognition Control by Modulating Electrostatic Interactions. <i>Journal of Proteome Research</i> , 2010, 9, 3118-3125.	1.8	32
102	BmKCT toxin inhibits glioma proliferation and tumor metastasis. <i>Cancer Letters</i> , 2010, 291, 158-166.	3.2	55
103	Cloning and functional characterization of a new antimicrobial peptide gene StCT1 from the venom of the scorpion <i>Scorpiops tibetanus</i> . <i>Peptides</i> , 2010, 31, 22-26.	1.2	36
104	Imcroporin, a New Cationic Antimicrobial Peptide from the Venom of the Scorpion <i>Isometrus maculatus</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 3472-3477.	1.4	83
105	Transcriptome analysis of the venom gland of the scorpion <i>Scorpiops jendeki</i> : implication for the evolution of the scorpion venom arsenal. <i>BMC Genomics</i> , 2009, 10, 290.	1.2	84
106	Molecular cloning and functional identification of a new K ⁺ channel blocker, LmKTx10, from the scorpion <i>Lychas mucronatus</i> . <i>Peptides</i> , 2009, 30, 675-680.	1.2	17
107	Molecular Information of Charybdotoxin Blockade in the Large Conductance Calcium-activated Potassium Channel. <i>Journal of Chemical Information and Modeling</i> , 2009, 49, 1831-1838.	2.5	24
108	Molecular basis of inhibitory peptide maurotoxin recognizing Kv1.2 channel explored by ZDOCK and molecular dynamic simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 70, 844-854.	1.5	55

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109	Mucroporin, the First Cationic Host Defense Peptide from the Venom of <i>Lychas mucronatus</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 3967-3972.	1.4	84
110	Molecular cloning and electrophysiological studies on the first K ⁺ channel toxin (LmKTx8) derived from scorpion <i>Lychas mucronatus</i> . <i>Peptides</i> , 2007, 28, 2306-2312.	1.2	18
111	Cloning and characterization of BmK86, a novel K ⁺ -channel blocker from scorpion venom. <i>Biochemical and Biophysical Research Communications</i> , 2007, 360, 728-734.	1.0	26
112	Interaction Simulation of hERG K ⁺ -Channel with Its Specific BeKm-1 Peptide: Insights into the Selectivity of Molecular Recognition. <i>Journal of Proteome Research</i> , 2007, 6, 611-620.	1.8	53
113	Adaptive Evolution after Gene Duplication in β -KT α -14 Subfamily from <i>Buthus martensii</i> Karsch. <i>IUBMB Life</i> , 2005, 57, 513-521.	1.5	8
114	Simulation of the Interaction Between ScyTx and Small Conductance Calcium-Activated Potassium Channel by Docking and MM-PBSA. <i>Biophysical Journal</i> , 2004, 87, 105-112.	0.2	61
115	Expression, purification and functional characterization of a recombinant scorpion venom peptide BmTXK β . <i>Peptides</i> , 2003, 24, 187-192.	1.2	32
116	Does MMLV-RT lacking RNase H activity have the capability of switching templates during reverse transcription?. <i>FEBS Letters</i> , 2002, 520, 185-185.	1.3	5
117	A naturally occurring non-coding fusion transcript derived from scorpion venom gland: implication for the regulation of scorpion toxin gene expression. <i>FEBS Letters</i> , 2001, 508, 241-244.	1.3	6