Jie J Zheng

List of Publications by Year
in descending order

104 papers	8,735 citations	61984 43 h-index	43889 91 g-index
106 all docs	106 docs citations	106 times ranked	12272 citing authors

#	Article	IF	Citations
1	Characterizing the metabolic profile of dexamethasone treated human trabecular meshwork cells. Experimental Eye Research, 2022, 214, 108888.	2.6	1
2	Premise and peril of Wnt signaling activation through GSK-3Î² inhibition. IScience, 2022, 25, 104159.	4.1	22
3	Applying Proteinâ€“Protein Interactions and Complex Networks to Identify Novel Genes in Retinitis Pigmentosa Pathogenesis. International Journal of Molecular Sciences, 2022, 23, 3962.	4.1	1
4	R-etodolac is a more potent Wnt signaling inhibitor than enantiomer, S-etodolac. Biochemistry and Biophysics Reports, 2022, 30, 101231.	1.3	2
5	Human limbal epithelial stem cell regulation, bioengineering and function. Progress in Retinal and Eye Research, 2021, 85, 100956.	15.5	48
6	De Novo Design of Peptidic Positive Allosteric Modulators Targeting TRPV1 with Analgesic Effects. Advanced Science, 2021, 8, 2101716.	11.2	6
7	Wnt signaling activation: targets and therapeutic opportunities for stem cell therapy and regenerative medicine. RSC Chemical Biology, 2021, 2, 1144-1157.	4.1	14
8	Three-dimensional Imaging Coupled with Topological Quantification Uncovers Retinal Vascular Plexuses Undergoing Obliteration. Theranostics, 2021, 11, 1162-1175.	10.0	6
9	Wnt6 plays a complex role in maintaining human limbal stem/progenitor cells. Scientific Reports, 2021, 11, 20948.	3.3	6
10	Age at Glaucoma Diagnosis in Germline Myocilin Mutation Patients: Associations with Polymorphisms in Protein Stabilities. Genes, 2021, 12, 1802.	2.4	7
11	A Small-Molecule Wnt Mimic Improves Human Limbal Stem Cell ExÂVivo Expansion. IScience, 2020, 23, 101075.	4.1	11
12	Cellular and cytoskeletal alterations of scleral fibroblasts in response to glucocorticoid steroids. Experimental Eye Research, 2019, 187, 107774.	2.6	7
13	Oxidative stress upregulates Wnt signaling in human retinal microvascular endothelial cells through activation of disheveled. Journal of Cellular Biochemistry, 2019, 120, 14044-14054.	2.6	12
14	Wnt Signaling Is Required for the Maintenance of Human Limbal Stem/Progenitor Cells In Vitro. , 2019, 60, 107.		30
15	Heme Interaction with the Pyruvate Dehydrogenase Complex: A Novel Strategy to Promote Hypoxic Survival. FASEB Journal, 2019, 33, 652.12.	0.5	3
16	Consensus recommendations for trabecular meshwork cell isolation, characterization and culture. Experimental Eye Research, 2018, 171, 164-173.	2.6	221
17	Alteration of RNA Splicing by Small-Molecule Inhibitors of the Interaction between NHP2L1 and U4. SLAS Discovery, 2018, 23, 164-173.	2.7	14
18	Modulating the wnt signaling pathway with small molecules. Protein Science, 2017, 26, 650-661.	7.6	93

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19	Autoinhibition of Dishevelled protein regulated by its extreme C terminus plays a distinct role in Wnt/Î²-catenin and Wnt/planar cell polarity (PCP) signaling pathways. Journal of Biological Chemistry, 2017, 292, 5898-5908.	3.4	28
20	Small-molecule inhibition of Wnt signaling abrogates dexamethasone-induced phenotype of primary human trabecular meshwork cells. Experimental Cell Research, 2017, 357, 116-123.	2.6	19
21	Structural and functional insights into the interaction between the Cas family scaffolding protein p130Cas and the focal adhesion-associated protein paxillin. Journal of Biological Chemistry, 2017, 292, 18281-18289.	3.4	16
22	Targeting Histone Demethylases in MYC-Driven Neuroblastomas with Ciclopirox. Cancer Research, 2017, 77, 4626-4638.	0.9	42
23	KIR2DL2/2DL3-E35 alleles are functionally stronger than -Q35 alleles. Scientific Reports, 2016, 6, 23689.	3.3	13
24	Drug Repurposing Identifies Inhibitors of Oseltamivirâ€Resistant Influenza Viruses. Angewandte Chemie - International Edition, 2016, 55, 3438-3441.	13.8	14
25	Drug Repurposing Identifies Inhibitors of Oseltamivirâ€Resistant Influenza Viruses. Angewandte Chemie, 2016, 128, 3499-3502.	2.0	1
26	Structural Basis for the Interaction between Pyk2-FAT Domain and Leupaxin LD Repeats. Biochemistry, 2016, 55, 1332-1345.	2.5	16
27	GNAI3: Another Candidate Gene to Screen in Persons with Ocular Albinism. PLoS ONE, 2016, 11, e0162273.	2.5	3
28	Apoptosome activation, an important molecular instigator in 6-mercaptopurine induced Leydig cell death. Scientific Reports, 2015, 5, 16488.	3.3	8
29	Structure-based Discovery of Novel Small Molecule Wnt Signaling Inhibitors by Targeting the Cysteine-rich Domain of Frizzled. Journal of Biological Chemistry, 2015, 290, 30596-30606.	3.4	38
30	Calcium ion as cellular messenger. Science China Life Sciences, 2015, 58, 1-5.	4.9	26
31	Association of an Inherited Genetic Variant With Vincristine-Related Peripheral Neuropathy in Children With Acute Lymphoblastic Leukemia. JAMA - Journal of the American Medical Association, 2015, 313, 815.	7.4	234
32	Conformational change of Dishevelled plays a key regulatory role in the Wnt signaling pathways. ELife, 2015, 4, e08142.	6.0	41
33	Structural and Mechanistic Insights into the Interaction between Pyk2 and Paxillin LD Motifs. Journal of Molecular Biology, 2014, 426, 3985-4001.	4.2	12
34	Mechanism of Polyubiquitination by Human Anaphase-Promoting Complex: RING Repurposing for Ubiquitin Chain Assembly. Molecular Cell, 2014, 56, 246-260.	9.7	98
35	High temperature sensitivity is intrinsic to voltage-gated potassium channels. ELife, 2014, 3, e03255.	6.0	58
36	Crucial Role for Phylogenetically Conserved Cytoplasmic Loop 3 in ABCC4 Protein Expression. Journal of Biological Chemistry, 2013, 288, 22207-22218.	3.4	7

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37	Structural insights into the role of the Smoothened cysteine-rich domain in Hedgehog signalling. Nature Communications, 2013, 4, 2965.	12.8	72
38	Genome-wide network analysis of Wnt signaling in three pediatric cancers. Scientific Reports, 2013, 3, 2969.	3.3	5
39	Genome-Wide Association Analyses Identify Susceptibility Loci For Vincristine-Induced Peripheral Neuropathy In Children With Acute Lymphoblastic Leukemia. Blood, 2013, 122, 618-618.	1.4	6
40	The Structural Basis of DKK-Mediated Inhibition of Wnt/LRP Signaling. Science Signaling, 2012, 5, pe22.	3.6	55
41	Chemical and genetic evidence for the involvement of Wnt antagonist Dickkopf2 in regulation of glucose metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11402-11407.	7.1	52
42	Identification Of Small Molecule TRABID Deubiquitinase Inhibitors By Computation-Based Virtual Screen. BMC Chemical Biology, 2012, 12, 4.	1.6	15
43	Virtual Ligand Screening Combined with NMR to Identify Dvl PDZ Domain Inhibitors Targeting the Wnt Signaling. Methods in Molecular Biology, 2012, 928, 17-28.	0.9	3
44	Synthesis of Potent Dishevelled PDZ Domain Inhibitors Guided by Virtual Screening and NMR Studies. Chemical Biology and Drug Design, 2012, 79, 376-383.	3.2	30
45	Inhibiting the Wnt Signaling Pathway with Small Molecules. , 2011, , 183-209.		7
46	Tetraspanins regulate the protrusive activities of cell membrane. Biochemical and Biophysical Research Communications, 2011, 415, 619-626.	2.1	66
47	Rational Design of T Cell Receptors with Enhanced Sensitivity for Antigen. PLoS ONE, 2011, 6, e18027.	2.5	22
48	PDZ domains and their binding partners: structure, specificity, and modification. Cell Communication and Signaling, 2010, 8, 8.	6.5	444
49	Macrophage Wnt7b is critical for kidney repair and regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4194-4199.	7.1	352
50	Identification of Transmembrane Protein 88 (TMEM88) as a Dishevelled-binding Protein. Journal of Biological Chemistry, 2010, 285, 41549-41556.	3.4	41
51	Structural modification of acyl carrier protein by butyryl group. Protein Science, 2009, 18, 240-246.	7.6	28
52	Human Disease-causing Mutations Disrupt an N-C-terminal Interaction and Channel Function of Bestrophin 1. Journal of Biological Chemistry, 2009, 284, 16473-16481.	3.4	22
53	Sulindac Inhibits Canonical Wnt Signaling by Blocking the PDZ Domain of the Protein Dishevelled. Angewandte Chemie - International Edition, 2009, 48, 6448-6452.	13.8	92
54	Optimizing Dvl PDZ domain inhibitor by exploring chemical space. Journal of Computer-Aided Molecular Design, 2009, 23, 37-47.	2.9	31

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55	Computational studies of H5N1 influenza virus resistance to oseltamivir. Protein Science, 2009, 18, 707-715.	7.6	27
56	Electrochemical cues regulate assembly of the Frizzled/Dishevelled complex at the plasma membrane during planar epithelial polarization. Nature Cell Biology, 2009, 11, 286-294.	10.3	160
57	Identification of tripeptides recognized by the PDZ domain of Dishevelled. Bioorganic and Medicinal Chemistry, 2009, 17, 1701-1708.	3.0	28
58	Discovery and Characterization of a Small Molecule Inhibitor of the PDZ Domain of Dishevelled. Journal of Biological Chemistry, 2009, 284, 16256-16263.	3.4	175
59	Transmembrane Interactions Are Needed for KAI1/CD82-Mediated Suppression of Cancer Invasion and Metastasis. American Journal of Pathology, 2009, 174, 647-660.	3.8	47
60	Crystal Structure of a Full-Length Î²-Catenin. Structure, 2008, 16, 478-487.	3.3	158
61	Phosphorylation of Paxillin LD4 Destabilizes Helix Formation and Inhibits Binding to Focal Adhesion Kinase. Biochemistry, 2008, 47, 548-554.	2.5	13
62	GIT1 Paxillin-binding Domain Is a Four-helix Bundle, and It Binds to Both Paxillin LD2 and LD4 Motifs. Journal of Biological Chemistry, 2008, 283, 18685-18693.	3.4	32
63	Characterization of the Kremen-binding Site on Dkk1 and Elucidation of the Role of Kremen in Dkk-mediated Wnt Antagonism. Journal of Biological Chemistry, 2008, 283, 23371-23375.	3.4	86
64	Structural Insight into the Mechanisms of Wnt Signaling Antagonism by Dkk. Journal of Biological Chemistry, 2008, 283, 23364-23370.	3.4	55
65	Therapeutic use of PDZ protein-protein interaction antagonism. Drug News and Perspectives, 2008, 21, 137-41.	1.5	21
66	An Antagonist of Dishevelled Protein-Protein Interaction Suppresses Î²-Cateninâ€“Dependent Tumor Cell Growth. Cancer Research, 2007, 67, 573-579.	0.9	223
67	Large-Scale Sequence Analysis of Avian Influenza Isolates. Science, 2006, 311, 1576-1580.	12.6	566
68	Rational Design and Applications of a Rac GTPaseâ€“Specific Small Molecule Inhibitor. Methods in Enzymology, 2006, 406, 554-565.	1.0	68
69	The Third 20 Amino Acid Repeat Is the Tightest Binding Site of APC for Î²-Catenin. Journal of Molecular Biology, 2006, 360, 133-144.	4.2	78
70	The influence of phosphorylation on the activity and structure of the neuronal IQ motif protein, PEP-19. Brain Research, 2006, 1092, 16-27.	2.2	12
71	Structure-Function Based Design of Small Molecule Inhibitors Targeting Rho Family GTPases. Current Topics in Medicinal Chemistry, 2006, 6, 1109-1116.	2.1	81
72	THE STRUCTURAL BIOLOGY OF TYPE II FATTY ACID BIOSYNTHESIS. Annual Review of Biochemistry, 2005, 74, 791-831.	11.1	704

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73	Identification of a Specific Inhibitor of the Dishevelled PDZ Domainâ€. Biochemistry, 2005, 44, 15495-15503.	2.5	193
74	Structural features of the focal adhesion kinase-paxillin complex give insight into the dynamics of focal adhesion assembly. Protein Science, 2005, 14, 644-652.	7.6	50
75	The LRP5 High-Bone-Mass G171V Mutation Disrupts LRP5 Interaction with Mesd. Molecular and Cellular Biology, 2004, 24, 4677-4684.	2.3	156
76	Multiple Mechanisms for Wnt11-mediated Repression of the Canonical Wnt Signaling Pathway. Journal of Biological Chemistry, 2004, 279, 24659-24665.	3.4	123
77	Rational design and characterization of a Rac GTPase-specific small molecule inhibitor. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7618-7623.	7.1	1,010
78	Interaction between the internal motif KTXXXI of Idax and mDvl PDZ domain. Biochemical and Biophysical Research Communications, 2004, 322, 326-332.	2.1	54
79	A substrate specific functional polymorphism of human Î³-glutamyl hydrolase alters catalytic activity and methotrexate polyglutamate accumulation in acute lymphoblastic leukaemia cells. Pharmacogenetics and Genomics, 2004, 14, 557-567.	5.7	83
80	Direct Binding of the PDZ Domain of Dishevelled to a Conserved Internal Sequence in the C-Terminal Region of Frizzled. Molecular Cell, 2003, 12, 1251-1260.	9.7	425
81	Key Residues Responsible for Acyl Carrier Protein and Î²-Ketoacyl-Acyl Carrier Protein Reductase (FabG) Interaction. Journal of Biological Chemistry, 2003, 278, 52935-52943.	3.4	135
82	Structural Insight into the Mechanisms of Targeting and Signaling of Focal Adhesion Kinase. Molecular and Cellular Biology, 2002, 22, 2751-2760.	2.3	86
83	The Solution Structure of Acyl Carrier Protein from Mycobacterium tuberculosis. Journal of Biological Chemistry, 2002, 277, 15874-15880.	3.4	111
84	1H, 15N and 13C assignments of the targeting (FAT) domain of focal adhesion kinase. Journal of Biomolecular NMR, 2002, 23, 75-76.	2.8	1
85	Topologies of consolidated ligands for the Src homology (SH)3 and SH2 domains of Abelson protein-tyrosine kinase. , 2002, , 156-157.		0
86	Structural basis of the recognition of the dishevelled DEP domain in the Wnt signaling pathway. Nature Structural Biology, 2000, 7, 1178-1184.	9.7	135
87	Rational Development of Cell-Penetrating High Affinity SH3 Domain Binding Peptides That Selectively Disrupt the Signal Transduction of Crk Family Adapters. Annals of the New York Academy of Sciences, 1999, 886, 289-292.	3.8	13
88	Flexibility of Interdomain Contacts Revealed by Topological Isomers of Bivalent Consolidated Ligands to the Dual Src Homology Domain SH(32) of Abelsonâ€,â€¡. Biochemistry, 1999, 38, 3491-3497.	2.5	21
89	Development of highly selective SH3 binding peptides for Crk and CRKL which disrupt Crk-complexes with DOCK180, SoS and C3G. Oncogene, 1998, 16, 1903-1912.	5.9	78
90	Physiological signals and oncogenesis mediated through Crk family adapter proteins. , 1998, 177, 535-552.		121

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91	The Solution Structure and Dynamics of the Pleckstrin Homology Domain of G Protein-coupled Receptor Kinase 2 (Î²-Adrenergic Receptor Kinase 1). Journal of Biological Chemistry, 1998, 273, 2835-2843.	3.4	75
92	The Solution Structure of the Pleckstrin Homology Domain of Human SOS1. Journal of Biological Chemistry, 1997, 272, 30340-30344.	3.4	58
93	Identification of the Binding Site for Acidic Phospholipids on the PH Domain of Dynamin: Implications for Stimulation of GTPase Activity. Journal of Molecular Biology, 1996, 255, 14-21.	4.2	251
94	Synthesis and characterization of branched phosphopeptides: Prototype consolidated ligands for SH(32) domains. International Journal of Peptide Research and Therapeutics, 1996, 3, 31-36.	0.1	4
95	Structural basis for the specific interaction of lysine-containing proline-rich peptides with the N-terminal SH3 domain of c-Crk. Structure, 1995, 3, 215-226.	3.3	249
96	The solution structure of Abl SH3, and its relationship to SH2 in the SH(32) construct. Structure, 1995, 3, 1075-1086.	3.3	45
97	Enhanced Affinities and Specificities of Consolidated Ligands for the Src Homology (SH) 3 and SH2 Domains of Abelson Protein-tyrosine Kinase. Journal of Biological Chemistry, 1995, 270, 26738-26741.	3.4	35
98	Lectin domains in the toxin ofBordetella pertussis: selectin mimicry linked to microbial pathogenesis. Glycoconjugate Journal, 1994, 11, 501-506.	2.7	19
99	Protein Indirect Relaxation Effects in Exchange-Transferred NOESY by a Rate-Matrix Analysis. Journal of Magnetic Resonance Series B, 1993, 101, 262-270.	1.6	32
100	A study of the binding of NADP coenzymes to dihydrofolate reductase by raman difference spectroscopy. FEBS Journal, 1993, 215, 9-16.	0.2	11
101	A vibrational analysis of the catalytically important C4-H bonds of NADH bound to lactate or malate dehydrogenase: ground-state effects. Biochemistry, 1992, 31, 5085-5092.	2.5	40
102	The determination of the pKa of histidine residues in proteins by Raman difference spectroscopy. BBA - Proteins and Proteomics, 1991, 1078, 296-302.	2.1	19
103	Classical Raman spectroscopic studies of NADH and NAD+ bound to lactate dehydrogenase by difference techniques. Biochemistry, 1989, 28, 1525-1533.	2.5	36
104	Hydrogen bonding and reaction specificity in lactate dehydrogenase studied by Raman spectroscopy. The Journal of Physical Chemistry, 1989, 93, 4710-4713.	2.9	11