

# Jie J Zheng

## List of Publications by Year in descending order

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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	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
2	THE STRUCTURAL BIOLOGY OF TYPE II FATTY ACID BIOSYNTHESIS. Annual Review of Biochemistry, 2005, 74, 791-831.	11.1	704
3	Large-Scale Sequence Analysis of Avian Influenza Isolates. Science, 2006, 311, 1576-1580.	12.6	566
4	PDZ domains and their binding partners: structure, specificity, and modification. Cell Communication and Signaling, 2010, 8, 8.	6.5	444
5	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
6	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
7	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
8	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
9	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
10	An Antagonist of Dishevelled Protein-Protein Interaction Suppresses $\beta$ -Catenin-Dependent Tumor Cell Growth. Cancer Research, 2007, 67, 573-579.	0.9	223
11	Consensus recommendations for trabecular meshwork cell isolation, characterization and culture. Experimental Eye Research, 2018, 171, 164-173.	2.6	221
12	Identification of a Specific Inhibitor of the Dishevelled PDZ Domain. Biochemistry, 2005, 44, 15495-15503.	2.5	193
13	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
14	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
15	Crystal Structure of a Full-Length $\beta$ -Catenin. Structure, 2008, 16, 478-487.	3.3	158
16	The LRP5 High-Bone-Mass G171V Mutation Disrupts LRP5 Interaction with Mesd. Molecular and Cellular Biology, 2004, 24, 4677-4684.	2.3	156
17	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
18	Key Residues Responsible for Acyl Carrier Protein and $\beta$ -Ketoacyl-Acyl Carrier Protein Reductase (FabG) Interaction. Journal of Biological Chemistry, 2003, 278, 52935-52943.	3.4	135

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19	Multiple Mechanisms for Wnt11-mediated Repression of the Canonical Wnt Signaling Pathway. <i>Journal of Biological Chemistry</i> , 2004, 279, 24659-24665.	3.4	123
20	Physiological signals and oncogenesis mediated through Crk family adapter proteins. , 1998, 177, 535-552.		121
21	The Solution Structure of Acyl Carrier Protein from <i>Mycobacterium tuberculosis</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 15874-15880.	3.4	111
22	Mechanism of Polyubiquitination by Human Anaphase-Promoting Complex: RING Repurposing for Ubiquitin Chain Assembly. <i>Molecular Cell</i> , 2014, 56, 246-260.	9.7	98
23	Modulating the wnt signaling pathway with small molecules. <i>Protein Science</i> , 2017, 26, 650-661.	7.6	93
24	Sulindac Inhibits Canonical Wnt Signaling by Blocking the PDZ Domain of the Protein Dishevelled. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6448-6452.	13.8	92
25	Structural Insight into the Mechanisms of Targeting and Signaling of Focal Adhesion Kinase. <i>Molecular and Cellular Biology</i> , 2002, 22, 2751-2760.	2.3	86
26	Characterization of the Kremen-binding Site on Dkk1 and Elucidation of the Role of Kremen in Dkk-mediated Wnt Antagonism. <i>Journal of Biological Chemistry</i> , 2008, 283, 23371-23375.	3.4	86
27	A substrate specific functional polymorphism of human $\hat{1}^3$ -glutamyl hydrolase alters catalytic activity and methotrexate polyglutamate accumulation in acute lymphoblastic leukaemia cells. <i>Pharmacogenetics and Genomics</i> , 2004, 14, 557-567.	5.7	83
28	Structure-Function Based Design of Small Molecule Inhibitors Targeting Rho Family GTPases. <i>Current Topics in Medicinal Chemistry</i> , 2006, 6, 1109-1116.	2.1	81
29	Development of highly selective SH3 binding peptides for Crk and CRKL which disrupt Crk-complexes with DOCK180, SoS and C3G. <i>Oncogene</i> , 1998, 16, 1903-1912.	5.9	78
30	The Third 20 Amino Acid Repeat Is the Tightest Binding Site of APC for $\hat{1}^2$ -Catenin. <i>Journal of Molecular Biology</i> , 2006, 360, 133-144.	4.2	78
31	The Solution Structure and Dynamics of the Pleckstrin Homology Domain of G Protein-coupled Receptor Kinase 2 ( $\hat{1}^2$ -Adrenergic Receptor Kinase 1). <i>Journal of Biological Chemistry</i> , 1998, 273, 2835-2843.	3.4	75
32	Structural insights into the role of the Smoothened cysteine-rich domain in Hedgehog signalling. <i>Nature Communications</i> , 2013, 4, 2965.	12.8	72
33	Rational Design and Applications of a Rac GTPaseâ€™Specific Small Molecule Inhibitor. <i>Methods in Enzymology</i> , 2006, 406, 554-565.	1.0	68
34	Tetraspanins regulate the protrusive activities of cell membrane. <i>Biochemical and Biophysical Research Communications</i> , 2011, 415, 619-626.	2.1	66
35	The Solution Structure of the Pleckstrin Homology Domain of Human SOS1. <i>Journal of Biological Chemistry</i> , 1997, 272, 30340-30344.	3.4	58
36	High temperature sensitivity is intrinsic to voltage-gated potassium channels. <i>ELife</i> , 2014, 3, e03255.	6.0	58

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37	Structural Insight into the Mechanisms of Wnt Signaling Antagonism by Dkk. <i>Journal of Biological Chemistry</i> , 2008, 283, 23364-23370.	3.4	55
38	The Structural Basis of DKK-Mediated Inhibition of Wnt/LRP Signaling. <i>Science Signaling</i> , 2012, 5, pe22.	3.6	55
39	Interaction between the internal motif KTXXXI of Idax and mDvl PDZ domain. <i>Biochemical and Biophysical Research Communications</i> , 2004, 322, 326-332.	2.1	54
40	Chemical and genetic evidence for the involvement of Wnt antagonist Dickkopf2 in regulation of glucose metabolism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 11402-11407.	7.1	52
41	Structural features of the focal adhesion kinase-paxillin complex give insight into the dynamics of focal adhesion assembly. <i>Protein Science</i> , 2005, 14, 644-652.	7.6	50
42	Human limbal epithelial stem cell regulation, bioengineering and function. <i>Progress in Retinal and Eye Research</i> , 2021, 85, 100956.	15.5	48
43	Transmembrane Interactions Are Needed for KAI1/CD82-Mediated Suppression of Cancer Invasion and Metastasis. <i>American Journal of Pathology</i> , 2009, 174, 647-660.	3.8	47
44	The solution structure of Abl SH3, and its relationship to SH2 in the SH(32) construct. <i>Structure</i> , 1995, 3, 1075-1086.	3.3	45
45	Targeting Histone Demethylases in MYC-Driven Neuroblastomas with Ciclopirox. <i>Cancer Research</i> , 2017, 77, 4626-4638.	0.9	42
46	Identification of Transmembrane Protein 88 (TMEM88) as a Dishevelled-binding Protein. <i>Journal of Biological Chemistry</i> , 2010, 285, 41549-41556.	3.4	41
47	Conformational change of Dishevelled plays a key regulatory role in the Wnt signaling pathways. <i>ELife</i> , 2015, 4, e08142.	6.0	41
48	A vibrational analysis of the catalytically important C4-H bonds of NADH bound to lactate or malate dehydrogenase: ground-state effects. <i>Biochemistry</i> , 1992, 31, 5085-5092.	2.5	40
49	Structure-based Discovery of Novel Small Molecule Wnt Signaling Inhibitors by Targeting the Cysteine-rich Domain of Frizzled. <i>Journal of Biological Chemistry</i> , 2015, 290, 30596-30606.	3.4	38
50	Classical Raman spectroscopic studies of NADH and NAD <sup>+</sup> bound to lactate dehydrogenase by difference techniques. <i>Biochemistry</i> , 1989, 28, 1525-1533.	2.5	36
51	Enhanced Affinities and Specificities of Consolidated Ligands for the Src Homology (SH) 3 and SH2 Domains of Abelson Protein-tyrosine Kinase. <i>Journal of Biological Chemistry</i> , 1995, 270, 26738-26741.	3.4	35
52	Protein Indirect Relaxation Effects in Exchange-Transferred NOESY by a Rate-Matrix Analysis. <i>Journal of Magnetic Resonance Series B</i> , 1993, 101, 262-270.	1.6	32
53	GIT1 Paxillin-binding Domain Is a Four-helix Bundle, and It Binds to Both Paxillin LD2 and LD4 Motifs. <i>Journal of Biological Chemistry</i> , 2008, 283, 18685-18693.	3.4	32
54	Optimizing Dvl PDZ domain inhibitor by exploring chemical space. <i>Journal of Computer-Aided Molecular Design</i> , 2009, 23, 37-47.	2.9	31

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55	Synthesis of Potent Dishevelled PDZ Domain Inhibitors Guided by Virtual Screening and NMR Studies. <i>Chemical Biology and Drug Design</i> , 2012, 79, 376-383.	3.2	30
56	Wnt Signaling Is Required for the Maintenance of Human Limbal Stem/Progenitor Cells In Vitro. , 2019, 60, 107.		30
57	Structural modification of acyl carrier protein by butyryl group. <i>Protein Science</i> , 2009, 18, 240-246.	7.6	28
58	Identification of tripeptides recognized by the PDZ domain of Dishevelled. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 1701-1708.	3.0	28
59	Autoinhibition of Dishevelled protein regulated by its extreme C terminus plays a distinct role in Wnt/ $\beta$ -catenin and Wnt/planar cell polarity (PCP) signaling pathways. <i>Journal of Biological Chemistry</i> , 2017, 292, 5898-5908.	3.4	28
60	Computational studies of H5N1 influenza virus resistance to oseltamivir. <i>Protein Science</i> , 2009, 18, 707-715.	7.6	27
61	Calcium ion as cellular messenger. <i>Science China Life Sciences</i> , 2015, 58, 1-5.	4.9	26
62	Human Disease-causing Mutations Disrupt an N-C-terminal Interaction and Channel Function of Bestrophin 1. <i>Journal of Biological Chemistry</i> , 2009, 284, 16473-16481.	3.4	22
63	Rational Design of T Cell Receptors with Enhanced Sensitivity for Antigen. <i>PLoS ONE</i> , 2011, 6, e18027.	2.5	22
64	Premise and peril of Wnt signaling activation through GSK-3 $\beta$ inhibition. <i>IScience</i> , 2022, 25, 104159.	4.1	22
65	Flexibility of Interdomain Contacts Revealed by Topological Isomers of Bivalent Consolidated Ligands to the Dual Src Homology Domain SH(32) of Abelson $\epsilon$ . <i>Biochemistry</i> , 1999, 38, 3491-3497.	2.5	21
66	Therapeutic use of PDZ protein-protein interaction antagonism. <i>Drug News and Perspectives</i> , 2008, 21, 137-41.	1.5	21
67	The determination of the pKa of histidine residues in proteins by Raman difference spectroscopy. <i>BBA - Proteins and Proteomics</i> , 1991, 1078, 296-302.	2.1	19
68	Lectin domains in the toxin of <i>Bordetella pertussis</i> : selectin mimicry linked to microbial pathogenesis. <i>Glycoconjugate Journal</i> , 1994, 11, 501-506.	2.7	19
69	Small-molecule inhibition of Wnt signaling abrogates dexamethasone-induced phenotype of primary human trabecular meshwork cells. <i>Experimental Cell Research</i> , 2017, 357, 116-123.	2.6	19
70	Structural Basis for the Interaction between Pyk2-FAT Domain and Leupaxin LD Repeats. <i>Biochemistry</i> , 2016, 55, 1332-1345.	2.5	16
71	Structural and functional insights into the interaction between the Cas family scaffolding protein p130Cas and the focal adhesion-associated protein paxillin. <i>Journal of Biological Chemistry</i> , 2017, 292, 18281-18289.	3.4	16
72	Identification Of Small Molecule TRABID Deubiquitinase Inhibitors By Computation-Based Virtual Screen. <i>BMC Chemical Biology</i> , 2012, 12, 4.	1.6	15

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73	Drug Repurposing Identifies Inhibitors of Oseltamivir-Resistant Influenza Viruses. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3438-3441.	13.8	14
74	Wnt signaling activation: targets and therapeutic opportunities for stem cell therapy and regenerative medicine. <i>RSC Chemical Biology</i> , 2021, 2, 1144-1157.	4.1	14
75	Alteration of RNA Splicing by Small-Molecule Inhibitors of the Interaction between NHP2L1 and U4. <i>SLAS Discovery</i> , 2018, 23, 164-173.	2.7	14
76	Rational Development of Cell-Penetrating High Affinity SH3 Domain Binding Peptides That Selectively Disrupt the Signal Transduction of Crk Family Adapters. <i>Annals of the New York Academy of Sciences</i> , 1999, 886, 289-292.	3.8	13
77	Phosphorylation of Paxillin LD4 Destabilizes Helix Formation and Inhibits Binding to Focal Adhesion Kinase. <i>Biochemistry</i> , 2008, 47, 548-554.	2.5	13
78	KIR2DL2/2DL3-E35 alleles are functionally stronger than -Q35 alleles. <i>Scientific Reports</i> , 2016, 6, 23689.	3.3	13
79	The influence of phosphorylation on the activity and structure of the neuronal IQ motif protein, PEP-19. <i>Brain Research</i> , 2006, 1092, 16-27.	2.2	12
80	Structural and Mechanistic Insights into the Interaction between Pyk2 and Paxillin LD Motifs. <i>Journal of Molecular Biology</i> , 2014, 426, 3985-4001.	4.2	12
81	Oxidative stress upregulates Wnt signaling in human retinal microvascular endothelial cells through activation of disheveled. <i>Journal of Cellular Biochemistry</i> , 2019, 120, 14044-14054.	2.6	12
82	Hydrogen bonding and reaction specificity in lactate dehydrogenase studied by Raman spectroscopy. <i>The Journal of Physical Chemistry</i> , 1989, 93, 4710-4713.	2.9	11
83	A study of the binding of NADP coenzymes to dihydrofolate reductase by raman difference spectroscopy. <i>FEBS Journal</i> , 1993, 215, 9-16.	0.2	11
84	A Small-Molecule Wnt Mimic Improves Human Limbal Stem Cell Ex Vivo Expansion. <i>IScience</i> , 2020, 23, 101075.	4.1	11
85	Apoptosome activation, an important molecular instigator in 6-mercaptopurine induced Leydig cell death. <i>Scientific Reports</i> , 2015, 5, 16488.	3.3	8
86	Inhibiting the Wnt Signaling Pathway with Small Molecules. , 2011, , 183-209.		7
87	Crucial Role for Phylogenetically Conserved Cytoplasmic Loop 3 in ABCC4 Protein Expression. <i>Journal of Biological Chemistry</i> , 2013, 288, 22207-22218.	3.4	7
88	Cellular and cytoskeletal alterations of scleral fibroblasts in response to glucocorticoid steroids. <i>Experimental Eye Research</i> , 2019, 187, 107774.	2.6	7
89	Age at Glaucoma Diagnosis in Germline Myocilin Mutation Patients: Associations with Polymorphisms in Protein Stabilities. <i>Genes</i> , 2021, 12, 1802.	2.4	7
90	De Novo Design of Peptidic Positive Allosteric Modulators Targeting TRPV1 with Analgesic Effects. <i>Advanced Science</i> , 2021, 8, 2101716.	11.2	6

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91	Three-dimensional Imaging Coupled with Topological Quantification Uncovers Retinal Vascular Plexuses Undergoing Obliteration. <i>Theranostics</i> , 2021, 11, 1162-1175.	10.0	6
92	Genome-Wide Association Analyses Identify Susceptibility Loci For Vincristine-Induced Peripheral Neuropathy In Children With Acute Lymphoblastic Leukemia. <i>Blood</i> , 2013, 122, 618-618.	1.4	6
93	Wnt6 plays a complex role in maintaining human limbal stem/progenitor cells. <i>Scientific Reports</i> , 2021, 11, 20948.	3.3	6
94	Genome-wide network analysis of Wnt signaling in three pediatric cancers. <i>Scientific Reports</i> , 2013, 3, 2969.	3.3	5
95	Synthesis and characterization of branched phosphopeptides: Prototype consolidated ligands for SH(32) domains. <i>International Journal of Peptide Research and Therapeutics</i> , 1996, 3, 31-36.	0.1	4
96	Virtual Ligand Screening Combined with NMR to Identify Dvl PDZ Domain Inhibitors Targeting the Wnt Signaling. <i>Methods in Molecular Biology</i> , 2012, 928, 17-28.	0.9	3
97	GNAI3: Another Candidate Gene to Screen in Persons with Ocular Albinism. <i>PLoS ONE</i> , 2016, 11, e0162273.	2.5	3
98	Heme Interaction with the Pyruvate Dehydrogenase Complex: A Novel Strategy to Promote Hypoxic Survival. <i>FASEB Journal</i> , 2019, 33, 652.12.	0.5	3
99	R-etodolac is a more potent Wnt signaling inhibitor than enantiomer, S-etodolac. <i>Biochemistry and Biophysics Reports</i> , 2022, 30, 101231.	1.3	2
100	<sup>1</sup> H, <sup>15</sup> N and <sup>13</sup> C assignments of the targeting (FAT) domain of focal adhesion kinase. <i>Journal of Biomolecular NMR</i> , 2002, 23, 75-76.	2.8	1
101	Drug Repurposing Identifies Inhibitors of Oseltamivir-Resistant Influenza Viruses. <i>Angewandte Chemie</i> , 2016, 128, 3499-3502.	2.0	1
102	Characterizing the metabolic profile of dexamethasone treated human trabecular meshwork cells. <i>Experimental Eye Research</i> , 2022, 214, 108888.	2.6	1
103	Applying Protein-Protein Interactions and Complex Networks to Identify Novel Genes in Retinitis Pigmentosa Pathogenesis. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3962.	4.1	1
104	Topologies of consolidated ligands for the Src homology (SH)3 and SH2 domains of Abelson protein-tyrosine kinase. , 2002, , 156-157.		0