Yan Jessie Zhang

List of Publications by Year
in descending order

69 papers	3,413 citations	218677 26 h-index	149698 56 g-index
76 all docs	76 docs citations	76 times ranked	4320 citing authors

#	Article	IF	Citations
1	SCP4-STK35/PDIK1L complex is a dual phospho-catalytic signaling dependency in acute myeloid leukemia. Cell Reports, 2022, 38, 110233.	6.4	1
2	Targeted Covalent Inhibition of Small CTD Phosphatase 1 to Promote the Degradation of the REST Transcription Factor in Human Cells. Journal of Medicinal Chemistry, 2022, 65, 507-519.	6.4	1
3	Machine learning-aided engineering of hydrolases for PET depolymerization. Nature, 2022, 604, 662-667.	27.8	396
4	Kinetic, Inhibition, and Structural Characterization of a Malonate Semialdehyde Decarboxylase-like Protein from Calothrix sp. PCC 6303: A Gateway to the non-Pro1 Tautomerase Superfamily Members. Biochemistry, 2022, , .	2.5	2
5	Using fungible biosensors to evolve improved alkaloid biosyntheses. Nature Chemical Biology, 2022, 18, 981-989.	8.0	35
6	Kinetic and thermodynamic analysis defines roles for two metal ions in DNA polymerase specificity and catalysis. Journal of Biological Chemistry, 2021, 296, 100184.	3.4	11
7	What's all the phos about? Insights into the phosphorylation state of the RNA polymerase II C-terminal domainviamass spectrometry. RSC Chemical Biology, 2021, 2, 1084-1095.	4.1	4
8	The protein phosphatase PPM1A dephosphorylates and activates YAP to govern mammalian intestinal and liver regeneration. PLoS Biology, 2021, 19, e3001122.	5.6	13
9	Simplicity is the Ultimate Sophisticationâ€"Crosstalk of Post-translational Modifications on the RNA Polymerase II. Journal of Molecular Biology, 2021, 433, 166912.	4.2	16
10	Kinetic and Structural Analysis of Two Linkers in the Tautomerase Superfamily: Analysis and Implications. Biochemistry, 2021, 60, 1776-1786.	2.5	3
11	Evaluating Spatiotemporal Dynamics of Phosphorylation of RNA Polymerase II Carboxy-Terminal Domain by Ultraviolet Photodissociation Mass Spectrometry. Journal of the American Chemical Society, 2021, 143, 8488-8498.	13.7	7
12	Advancements in chemical biology targeting the kinases and phosphatases of RNA polymerase II-mediated transcription. Current Opinion in Chemical Biology, 2021, 63, 68-77.	6.1	1
13	Computerâ€based engineering of thermostabilized antibody fragments. AICHE Journal, 2020, 66, e16864.	3.6	12
14	Structural Motifs for CTD Kinase Specificity on RNA Polymerase II during Eukaryotic Transcription. ACS Chemical Biology, 2020, 15, 2259-2272.	3.4	8
15	Visible Light Mediated Bidirectional Control over Carbonic Anhydrase Activity in Cells and in Vivo Using Azobenzenesulfonamides. Journal of the American Chemical Society, 2020, 142, 14522-14531.	13.7	40
16	Structural Basis for the Asymmetry of a 4-Oxalocrotonate Tautomerase Trimer. Biochemistry, 2020, 59, 1592-1603.	2.5	6
17	Enzyme-mediated depletion of serum <scp>l</scp> -Met abrogates prostate cancer growth via multiple mechanisms without evidence of systemic toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13000-13011.	7.1	27
18	Electrophoretic Mobility Shift Assay of in vitro Phosphorylated RNA Polymerase II Carboxyl-terminal Domain Substrates. Bio-protocol, 2020, 10, e3648.	0.4	2

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19	Crystal Structure of the Ergothioneine Sulfoxide Synthase from Candidatus Chloracidobacterium thermophilum and Structure-Guided Engineering To Modulate Its Substrate Selectivity. ACS Catalysis, 2019, 9, 6955-6961.	11.2	18
20	Mapping RNAPII CTD Phosphorylation Reveals That the Identity and Modification of Seventh Heptad Residues Direct Tyr1 Phosphorylation. ACS Chemical Biology, 2019, 14, 2264-2275.	3.4	5
21	Structural, Kinetic, and Mechanistic Analysis of an Asymmetric 4-Oxalocrotonate Tautomerase Trimer. Biochemistry, 2019, 58, 2617-2627.	2.5	6
22	Structural determinants for accurate dephosphorylation of RNA polymerase II by its cognate C-terminal domain (CTD) phosphatase during eukaryotic transcription. Journal of Biological Chemistry, 2019, 294, 8592-8605.	3.4	10
23	Identification of the Formycin A Biosynthetic Gene Cluster from Streptomyces kaniharaensis Illustrates the Interplay between Biological Pyrazolopyrimidine Formation and de Novo Purine Biosynthesis. Journal of the American Chemical Society, 2019, 141, 6127-6131.	13.7	38
24	Modification of Ser 7 of the RNA Polymerase II Câ€terminal domain (CTD) regulates CTD phosphorylation patterns and transcription. FASEB Journal, 2019, 33, 458.6.	0.5	1
25	Tyr1 phosphorylation promotes phosphorylation of Ser2 on the C-terminal domain of eukaryotic RNA polymerase II by P-TEFb. ELife, 2019, 8, .	6.0	24
26	A global view of structureâ€"function relationships in the tautomerase superfamily. Journal of Biological Chemistry, 2018, 293, 2342-2357.	3.4	39
27	Snapshots of C-S Cleavage in Egt2 Reveals Substrate Specificity and Reaction Mechanism. Cell Chemical Biology, 2018, 25, 519-529.e4.	5.2	29
28	Inactivation of 4-Oxalocrotonate Tautomerase by 5-Halo-2-hydroxy-2,4-pentadienoates. Biochemistry, 2018, 57, 1012-1021.	2.5	2
29	Phosphatase activity of small C-terminal domain phosphatase 1 (SCP1) controls the stability of the key neuronal regulator RE1-silencing transcription factor (REST). Journal of Biological Chemistry, 2018, 293, 16851-16861.	3.4	14
30	Structural Characterization of the Hydratase-Aldolases, NahE and PhdJ: Implications for the Specificity, Catalysis, and N-Acetylneuraminate Lyase Subgroup of the Aldolase Superfamily. Biochemistry, 2018, 57, 3524-3536.	2.5	10
31	Chemical Tools for Studying the Impact of cis/trans Prolyl Isomerization on Signaling: A Case Study on RNA Polymerase II Phosphatase Activity and Specificity. Methods in Enzymology, 2018, 607, 269-297.	1.0	1
32	Structural Snapshots of an Engineered Cystathionine-Î³-lyase Reveal the Critical Role of Electrostatic Interactions in the Active Site. Biochemistry, 2017, 56, 876-885.	2.5	8
33	Structural heterogeneity in the intrinsically disordered RNA polymerase II C-terminal domain. Nature Communications, 2017, 8, 15231.	12.8	58
34	Phosphorylation induces sequence-specific conformational switches in the RNA polymerase II C-terminal domain. Nature Communications, 2017, 8, 15233.	12.8	70
35	IgG Fc domains that bind C1q but not effector FcÎ³ receptors delineate the importance of complement-mediated effector functions. Nature Immunology, 2017, 18, 889-898.	14.5	122
36	Kinetic and structural characterization of a cis -3-Chloroacrylic acid dehalogenase homologue in Pseudomonas sp. UW4: A potential step between subgroups in the tautomerase superfamily. Archives of Biochemistry and Biophysics, 2017, 636, 50-56.	3.0	9

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37	Mapping the Phosphorylation Pattern of Drosophila melanogaster RNA Polymerase II Carboxyl-Terminal Domain Using Ultraviolet Photodissociation Mass Spectrometry. ACS Chemical Biology, 2017, 12, 153-162.	3.4	24
38	Systemic depletion of L-cyst(e)ine with cyst(e)inase increases reactive oxygen species and suppresses tumor growth. Nature Medicine, 2017, 23, 120-127.	30.7	413
39	Structure of Saccharomyces cerevisiae Rtr1 reveals an active site for an atypical phosphatase. Science Signaling, 2016, 9, ra24.	3.6	17
40	The bacterial catabolism of polycyclic aromatic hydrocarbons: Characterization of three hydratase-aldolase-catalyzed reactions. Perspectives in Science, 2016, 9, 33-41.	0.6	3
41	Dephosphorylating eukaryotic RNA polymerase II. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 372-387.	2.3	28
42	Chemical Tools To Decipher Regulation of Phosphatases by Proline Isomerization on Eukaryotic RNA Polymerase II. ACS Chemical Biology, 2015, 10, 2405-2414.	3.4	22
43	Pin1 cysteine-113 oxidation inhibits its catalytic activity and cellular function in Alzheimer's disease. Neurobiology of Disease, 2015, 76, 13-23.	4.4	91
44	A potent and selective inhibitor for the UBLCP1 proteasome phosphatase. Bioorganic and Medicinal Chemistry, 2015, 23, 2798-2809.	3.0	12
45	Active Pin1 is a key target of all-trans retinoic acid in acute promyelocytic leukemia and breast cancer. Nature Medicine, 2015, 21, 457-466.	30.7	220
46	Cross-Talk of Phosphorylation and Prolyl Isomerization of the C-terminal Domain of RNA Polymerase II. Molecules, 2014, 19, 1481-1511.	3.8	8
47	Characterization of Native Protein Complexes Using Ultraviolet Photodissociation Mass Spectrometry. Journal of the American Chemical Society, 2014, 136, 12920-12928.	13.7	102
48	Complete Protein Characterization Using Top-Down Mass Spectrometry and Ultraviolet Photodissociation. Journal of the American Chemical Society, 2013, 135, 12646-12651.	13.7	297
49	Novel Modifications on C-terminal Domain of RNA Polymerase II Can Fine-tune the Phosphatase Activity of Ssu72. ACS Chemical Biology, 2013, 8, 2042-2052.	3.4	25
50	Viewing serine/threonine protein phosphatases through the eyes of drug designers. FEBS Journal, 2013, 280, 4739-4760.	4.7	62
51	Uncoupling Intramolecular Processing and Substrate Hydrolysis in the N-Terminal Nucleophile Hydrolase hASRGL1 by Circular Permutation. ACS Chemical Biology, 2012, 7, 1840-1847.	3.4	18
52	Structural and Kinetic Analysis of Prolyl-isomerization/Phosphorylation Cross-Talk in the CTD Code. ACS Chemical Biology, 2012, 7, 1462-1470.	3.4	59
53	Selective Inactivation of a Human Neuronal Silencing Phosphatase by a Small Molecule Inhibitor. ACS Chemical Biology, 2011, 6, 511-519.	3.4	35
54	Kinetic, Crystallographic, and Mechanistic Characterization of TomN: Elucidation of a Function for a 4-Oxalocrotonate Tautomerase Homologue in the Tomaymycin Biosynthetic Pathway. Biochemistry, 2011, 50, 7600-7611.	2.5	17

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55	Death-Associated Protein Kinase 1 Phosphorylates Pin1 and Inhibits Its Prolyl Isomerase Activity and Cellular Function. Molecular Cell, 2011, 42, 147-159.	9.7	149
56	Crystal structure of Ssu72, an essential eukaryotic phosphatase specific for the C-terminal domain of RNA polymerase II, in complex with a transition state analogue. Biochemical Journal, 2011, 434, 435-444.	3.7	35
57	Structural and functional analysis of the phosphoryl transfer reaction mediated by the human small Câ€terminal domain phosphatase, Scp1. Protein Science, 2010, 19, 974-986.	7.6	34
58	Bio-molecular architects: a scaffold provided by the C-terminal domain of eukaryotic RNA polymerase II. Nano Reviews, 2010, 1, 5502.	3.7	7
59	Structural Basis for High-Affinity Peptide Inhibition of Human Pin1. ACS Chemical Biology, 2007, 2, 320-328.	3.4	123
60	Determinants for Dephosphorylation of the RNA Polymerase II C-Terminal Domain by Scp1. Molecular Cell, 2006, 24, 759-770.	9.7	103
61	Structure-function-folding relationship in a WW domain. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10648-10653.	7.1	199
62	Synthesis and biological evaluation of N-{4-[5-(2,4-diamino-6-oxo-1,6-dihydropyrimidin-5-yl)-2-(2,2,2-trifluoroacetyl)pentyl]benzoyl}-l-glutamic acid as a potential inhibitor of GAR Tfase and the de novo purine biosynthetic pathway. Bioorganic and Medicinal Chemistry, 2005, 13, 3593-3599.	3.0	7
63	Synthesis and biological evaluation of Î±- and Î³-carboxamide derivatives of 10-CF3CO-DDACTHF. Bioorganic and Medicinal Chemistry, 2005, 13, 3587-3592.	3.0	6
64	Design, synthesis, and biological evaluation of 10-methanesulfonyl-DDACTHF, 10-methanesulfonyl-5-DACTHF, and 10-methylthio-DDACTHF as potent inhibitors of GAR Tfase and the de novo purine biosynthetic pathway. Bioorganic and Medicinal Chemistry, 2005, 13, 3577-3585.	3.0	4
65	Crystal structures of apo wild-typeM. jannaschiityrosyl-tRNA synthetase (TyrRS) and an engineered TyrRS specific forO-methyl-L-tyrosine. Protein Science, 2005, 14, 1340-1349.	7.6	61
66	Design, synthesis, and biological evaluation of simplified Î±-Keto heterocycle, trifluoromethyl ketone, and formyl substituted folate analogues as potential inhibitors of GAR transformylase and AICAR transformylase. Bioorganic and Medicinal Chemistry, 2003, 11, 4487-4501.	3.0	34
67	10-(2-Benzoxazolcarbonyl)-5,10-dideaza-acyclic-5,6,7,8-tetrahydrofolic acid. Bioorganic and Medicinal Chemistry, 2003, 11, 4503-4509.	3.0	6
68	Design, synthesis and biological evaluation of 10-CF3CO-DDACTHF analogues and derivatives as inhibitors of GAR Tfase and the de novo purine biosynthetic pathway. Bioorganic and Medicinal Chemistry, 2003, 11, 4511-4521.	3.0	16
69	10-Formyl-5,10-dideaza-acyclic-5,6,7,8-tetrahydrofolic acid (10-Formyl-DDACTHF). Bioorganic and Medicinal Chemistry, 2002, 10, 2739-2749.	3.0	16