Huanchen Wang

List of Publications by Year
in descending order

34	1,003	430874 18	454955 30
papers	citations	h-index	g-index

35	35	35	752
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structural basis for an inositol pyrophosphate kinase surmounting phosphate crowding. Nature Chemical Biology, 2012, 8, 111-116.	8.0	123
2	Control of XPR1-dependent cellular phosphate efflux by InsP ₈ is an exemplar for functionally-exclusive inositol pyrophosphate signaling. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3568-3574.	7.1	70
3	Synthesis of Densely Phosphorylated Bisâ€1,5â€Diphosphoâ€myoâ€Inositol Tetrakisphosphate and its Enantiomer by Bidirectional Pâ€Anhydride Formation. Angewandte Chemie - International Edition, 2014, 53, 9508-9511.	13.8	66
4	KO of 5-InsP ₇ kinase activity transforms the HCT116 colon cancer cell line into a hypermetabolic, growth-inhibited phenotype. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11968-11973.	7.1	62
5	The Significance of the Bifunctional Kinase/Phosphatase Activities of Diphosphoinositol Pentakisphosphate Kinases (PPIP5Ks) for Coupling Inositol Pyrophosphate Cell Signaling to Cellular Phosphate Homeostasis. Journal of Biological Chemistry, 2017, 292, 4544-4555.	3.4	57
6	Synthetic Inositol Phosphate Analogs Reveal that PPIP5K2 Has a Surface-Mounted Substrate Capture Site that Is a Target for Drug Discovery. Chemistry and Biology, 2014, 21, 689-699.	6.0	56
7	IP6K structure and the molecular determinants of catalytic specificity in an inositol phosphate kinase family. Nature Communications, 2014, 5, 4178.	12.8	55
8	Asp1 from Schizosaccharomyces pombe Binds a [2Fe-2S]²⁺ Cluster Which Inhibits Inositol Pyrophosphate 1-Phosphatase Activity. Biochemistry, 2015, 54, 6462-6474.	2.5	51
9	The kinetic properties of a human PPIP5K reveal that its kinase activities are protected against the consequences of a deteriorating cellular bioenergetic environment. Bioscience Reports, 2013, 33, e00022.	2.4	38
10	Inhibition of Inositol Polyphosphate Kinases by Quercetin and Related Flavonoids: A Structureâ€“Activity Analysis. Journal of Medicinal Chemistry, 2019, 62, 1443-1454.	6.4	38
11	Cytokine signaling through Drosophila Mthl10 ties lifespan to environmental stress. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13786-13791.	7.1	36
12	A two-way switch for inositol pyrophosphate signaling: Evolutionary history and biological significance of a unique, bifunctional kinase/phosphatase. Advances in Biological Regulation, 2020, 75, 100674.	2.3	33
13	Inositol phosphate kinases: Expanding the biological significance of the universal core of the protein kinase fold. Advances in Biological Regulation, 2019, 71, 118-127.	2.3	32
14	First synthetic analogues of diphosphoinositol polyphosphates: interaction with PP-InsP5 kinase. Chemical Communications, 2012, 48, 11292.	4.1	30
15	InsP₇is a small-molecule regulator of NUDT3-mediated mRNA decapping and processing-body dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19245-19253.	7.1	27
16	The significance of the 1-kinase/1-phosphatase activities of the PPIP5K family. Advances in Biological Regulation, 2017, 63, 98-106.	2.3	23
17	Structural and biochemical characterization of Siw14: A protein-tyrosine phosphatase fold that metabolizes inositol pyrophosphates. Journal of Biological Chemistry, 2018, 293, 6905-6914.	3.4	23
18	Cellular Cations Control Conformational Switching of Inositol Pyrophosphate Analogues. Chemistry - A European Journal, 2016, 22, 12406-12414.	3.3	19

#	Article	IF	Citations
19	Synthetic tools for studying the chemical biology of InsP₈. Chemical Communications, 2015, 51, 12605-12608.	4.1	18
20	Metabolic supervision by PPIP5K, an inositol pyrophosphate kinase/phosphatase, controls proliferation of the HCT116 tumor cell line. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	16
21	Use of Protein Kinaseâ€“Focused Compound Libraries for the Discovery of New Inositol Phosphate Kinase Inhibitors. SLAS Discovery, 2018, 23, 982-988.	2.7	15
22	New structural insights reveal an expanded reaction cycle for inositol pyrophosphate hydrolysis by human DIPP1. FASEB Journal, 2021, 35, e21275.	0.5	15
23	Development of Novel IP6K Inhibitors for the Treatment of Obesity and Obesity-Induced Metabolic Dysfunctions. Journal of Medicinal Chemistry, 2022, 65, 6869-6887.	6.4	15
24	Metabolism and Functions of Inositol Pyrophosphates: Insights Gained from the Application of Synthetic Analogues. Molecules, 2020, 25, 4515.	3.8	13
25	Inositol pyrophosphate synthesis by diphosphoinositol pentakisphosphate kinase-1 is regulated by phosphatidylinositol(4,5)bisphosphate. Bioscience Reports, 2018, 38, .	2.4	10
26	Synthesis of an Î±-phosphono-Î±,Î±-difluoroacetamide analogue of the diphosphoinositol pentakisphosphate 5-InsP₇. MedChemComm, 2019, 10, 1165-1172.	3.4	10
27	Structural and catalytic analyses of the InsP₆kinase activities of higher plant ITPKs. FASEB Journal, 2022, 36, .	0.5	10
28	Dynamics of Substrate Processing by PPIP5K2, a Versatile Catalytic Machine. Structure, 2019, 27, 1022-1028.e2.	3.3	9
29	MicroRNA-21 mediates high phosphate-induced endothelial cell apoptosis. American Journal of Physiology - Cell Physiology, 2018, 315, C830-C838.	4.6	8
30	A structural exposÃ© of noncanonical molecular reactivity within the protein tyrosine phosphatase WPD loop. Nature Communications, 2022, 13, 2231.	12.8	7
31	Rapid stimulation of cellular Pi uptake by the inositol pyrophosphate InsP₈induced by its photothermal release from lipid nanocarriers using a near infra-red light-emitting diode. Chemical Science, 2020, 11, 10265-10278.	7.4	4
32	A High-Throughput Screening-Compatible Strategy for the Identification of Inositol Pyrophosphate Kinase Inhibitors. PLoS ONE, 2016, 11, e0164378.	2.5	2
33	The kinetic properties of a human PPIP5K reveal that its kinase activities are protected against the consequences of a deteriorating cellular bioenergetic environment. FASEB Journal, 2013, 27, 1050.3.	0.5	1
34	Crystal Structures of Candida albicans Phosphodiesterase 2 and Implications for Its Biological Functions. Biochemistry, 2018, 57, 6070-6077.	2.5	0