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	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
2	A structural exposÃ© of noncanonical molecular reactivity within the protein tyrosine phosphatase WPD loop. Nature Communications, 2022, 13, 2231.	12.8	7
3	Structural and catalytic analyses of the InsP₆kinase activities of higher plant ITPKs. FASEB Journal, 2022, 36, .	0.5	10
4	New structural insights reveal an expanded reaction cycle for inositol pyrophosphate hydrolysis by human DIPP1. FASEB Journal, 2021, 35, e21275.	0.5	15
5	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
6	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
7	Metabolism and Functions of Inositol Pyrophosphates: Insights Gained from the Application of Synthetic Analogues. Molecules, 2020, 25, 4515.	3.8	13
8	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
9	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
10	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
11	Synthesis of an Î±-phosphono-Î±,Î±-difluoroacetamide analogue of the diphosphoinositol pentakisphosphate 5-InsP₇. MedChemComm, 2019, 10, 1165-1172.	3.4	10
12	Dynamics of Substrate Processing by PPIP5K2, a Versatile Catalytic Machine. Structure, 2019, 27, 1022-1028.e2.	3.3	9
13	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
14	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
15	Inositol pyrophosphate synthesis by diphosphoinositol pentakisphosphate kinase-1 is regulated by phosphatidylinositol(4,5)bisphosphate. Bioscience Reports, 2018, 38, .	2.4	10
16	MicroRNA-21 mediates high phosphate-induced endothelial cell apoptosis. American Journal of Physiology - Cell Physiology, 2018, 315, C830-C838.	4.6	8
17	Crystal Structures of Candida albicans Phosphodiesterase 2 and Implications for Its Biological Functions. Biochemistry, 2018, 57, 6070-6077.	2.5	0
18	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

#	Article	IF	Citations
19	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
20	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
21	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
22	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
23	The significance of the 1-kinase/1-phosphatase activities of the PPIP5K family. Advances in Biological Regulation, 2017, 63, 98-106.	2.3	23
24	A High-Throughput Screening-Compatible Strategy for the Identification of Inositol Pyrophosphate Kinase Inhibitors. PLoS ONE, 2016, 11, e0164378.	2.5	2
25	Cellular Cations Control Conformational Switching of Inositol Pyrophosphate Analogues. Chemistry - A European Journal, 2016, 22, 12406-12414.	3.3	19
26	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
27	Synthetic tools for studying the chemical biology of InsP₈. Chemical Communications, 2015, 51, 12605-12608.	4.1	18
28	IP6K structure and the molecular determinants of catalytic specificity in an inositol phosphate kinase family. Nature Communications, 2014, 5, 4178.	12.8	55
29	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
30	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
31	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
32	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
33	First synthetic analogues of diphosphoinositol polyphosphates: interaction with PP-InsP5 kinase. Chemical Communications, 2012, 48, 11292.	4.1	30
34	Structural basis for an inositol pyrophosphate kinase surmounting phosphate crowding. Nature Chemical Biology, 2012, 8, 111-116.	8.0	123