Dorothea Fiedler

List of Publications by Year
in descending order

44 papers	1,602 citations	331538 21 h-index	345118 36 g-index
51 all docs	51 docs citations	51 times ranked	1353 citing authors

#	Article	IF	Citations
1	Structural evidence for visual arrestin priming via complexation of phosphoinositols. Structure, 2022, 30, 263-277.e5.	1.6	12
2	The inositol pyrophosphate metabolism of Dictyostelium discoideum does not regulate inorganic polyphosphate (polyP) synthesis. Advances in Biological Regulation, 2022, 83, 100835.	1.4	10
3	Pharmacological tools to investigate inositol polyphosphate kinases â€“ Enzymes of increasing therapeutic relevance. Advances in Biological Regulation, 2022, 83, 100836.	1.4	7
4	<i>Arabidopsis</i> PFA-DSP-Type Phosphohydrolases Target Specific Inositol Pyrophosphate Messengers. Biochemistry, 2022, 61, 1213-1227.	1.2	4
5	Versatile signaling mechanisms of inositol pyrophosphates. Current Opinion in Chemical Biology, 2022, 70, 102177.	2.8	16
6	Affinityâ€based proteomics reveals novel targets of inositol pyrophosphate (5â€IP 7)â€dependent phosphorylation and binding in Trypanosoma cruzi replicative stages. Molecular Microbiology, 2021, 115, 986-1004.	1.2	5
7	Inositol pyrophosphates promote the interaction of SPX domains with the coiled-coil motif of PHR transcription factors to regulate plant phosphate homeostasis. Nature Communications, 2021, 12, 384.	5.8	105
8	Identification of Small-Molecule Inhibitors of Human Inositol Hexakisphosphate Kinases by High-Throughput Screening. ACS Pharmacology and Translational Science, 2021, 4, 780-789.	2.5	22
9	ITPK1 is an InsP6/ADP phosphotransferase that controls phosphate signaling in Arabidopsis. Molecular Plant, 2021, 14, 1864-1880.	3.9	51
10	Conversion of dietary inositol into propionate and acetate by commensal Anaerostipes associates with host health. Nature Communications, 2021, 12, 4798.	5.8	76
11	Investigation of a potential electrogenic transport-system for myo-inositol in the small intestine of laying hens. British Poultry Science, 2021, , 1-7.	0.8	1
12	Using Biotinylated <i>myo</i>-Inositol Hexakisphosphate to Investigate Inositol Pyrophosphateâ€“Protein Interactions with Surface-Based Biosensors. Biochemistry, 2021, 60, 2739-2748.	1.2	6
13	Dissecting the activation of insulin degrading enzyme by inositol pyrophosphates and their bisphosphonate analogs. Chemical Science, 2021, 12, 10696-10702.	3.7	8
14	Analysis of inositol phosphate metabolism by capillary electrophoresis electrospray ionization mass spectrometry. Nature Communications, 2020, 11, 6035.	5.8	69
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.	3.3	27
16	Analysis of metabolically labeled inositol phosphate messengers by NMR. Methods in Enzymology, 2020, 641, 35-52.	0.4	1
17	Triplexed Affinity Reagents to Sample the Mammalian Inositol Pyrophosphate Interactome. Cell Chemical Biology, 2020, 27, 1097-1108.e4.	2.5	21
18	The inositol pyrophosphate 5-InsP ₇ drives sodium-potassium pump degradation by relieving an autoinhibitory domain of PI3K p85Î±. Science Advances, 2020, 6, .	4.7	16

#	Article	IF	Citations
19	Delivery of <i>myo</i>â€Inositol Hexakisphosphate to the Cell Nucleus with a Prolineâ€Based Cellâ€Penetrating Peptide. Angewandte Chemie, 2020, 132, 15716-15719.	1.6	1
20	IP₇-SPX Domain Interaction Controls Fungal Virulence by Stabilizing Phosphate Signaling Machinery. MBio, 2020, 11, .	1.8	21
21	Delivery of <i>myo</i>â€Inositol Hexakisphosphate to the Cell Nucleus with a Prolineâ€Based Cellâ€Penetrating Peptide. Angewandte Chemie - International Edition, 2020, 59, 15586-15589.	7.2	11
22	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.	3.3	70
23	Scalable Chemoenzymatic Synthesis of Inositol Pyrophosphates. Biochemistry, 2019, 58, 3927-3932.	1.2	29
24	Harnessing¹³C-labeled<i>myo</i>-inositol to interrogate inositol phosphate messengers by NMR. Chemical Science, 2019, 10, 5267-5274.	3.7	56
25	Two bifunctional inositol pyrophosphate kinases/phosphatases control plant phosphate homeostasis. ELife, 2019, 8, .	2.8	118
26	MLKL Requires the Inositol Phosphate Code to Execute Necroptosis. Molecular Cell, 2018, 70, 936-948.e7.	4.5	111
27	Pyrophosphorylation <i>via</i> selective phosphoprotein derivatization. Chemical Science, 2018, 9, 5929-5936.	3.7	9
28	Unambiguous Identification of Serine and Threonine Pyrophosphorylation Using Neutral-Loss-Triggered Electron-Transfer/Higher-Energy Collision Dissociation. Analytical Chemistry, 2017, 89, 3672-3680.	3.2	22
29	A Novel Inositol Pyrophosphate Phosphatase in Saccharomyces cerevisiae. Journal of Biological Chemistry, 2016, 291, 6772-6783.	1.6	55
30	Inositol hexakisphosphate kinase 1 (IP6K1) activity is required for cytoplasmic dynein-driven transport. Biochemical Journal, 2016, 473, 3031-3047.	1.7	57
31	Chemical tools for interrogating inositol pyrophosphate structure and function. Chemical Society Reviews, 2016, 45, 6311-6326.	18.7	33
32	Cellular Cations Control Conformational Switching of Inositol Pyrophosphate Analogues. Chemistry - A European Journal, 2016, 22, 12406-12414.	1.7	19
33	Inositol polyphosphates intersect with signaling and metabolic networks via two distinct mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6757-E6765.	3.3	77
34	A Stable Pyrophosphoserine Analog for Incorporation into Peptides and Proteins. ACS Chemical Biology, 2016, 11, 1066-1073.	1.6	10
35	An Affinity Reagent for the Recognition of Pyrophosphorylated Peptides. Angewandte Chemie - International Edition, 2015, 54, 3941-3945.	7.2	29
36	Establishing the Stability and Reversibility of Protein Pyrophosphorylation with Synthetic Peptides. ChemBioChem, 2015, 16, 415-423.	1.3	22

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37	A Fluorescent Sensor and Gel Stain for Detection of Pyrophosphorylated Proteins. ACS Chemical Biology, 2015, 10, 1958-1963.	1.6	23
38	Differential genetic interactions of yeast stress response <scp>MAPK</scp> pathways. Molecular Systems Biology, 2015, 11, 800.	3.2	47
39	Elucidating Diphosphoinositol Polyphosphate Function with Nonhydrolyzable Analogues. Angewandte Chemie, 2014, 126, 7320-7325.	1.6	13
40	Inositol Pyrophosphates Mediate the DNA-PK/ATM-p53 Cell Death Pathway by Regulating CK2 Phosphorylation of Tti1/Tel2. Molecular Cell, 2014, 54, 119-132.	4.5	103
41	Chemical Pyrophosphorylation of Functionally Diverse Peptides. Journal of the American Chemical Society, 2014, 136, 108-111.	6.6	36
42	Elucidating Diphosphoinositol Polyphosphate Function with Nonhydrolyzable Analogues. Angewandte Chemie - International Edition, 2014, 53, 7192-7197.	7.2	46
43	Chemical Genetics of Rapamycin-Insensitive TORC2 in S.Âcerevisiae. Cell Reports, 2013, 5, 1725-1736.	2.9	31
44	Synthesis and characterization of non-hydrolysable diphosphoinositol polyphosphate messengers. Chemical Science, 2013, 4, 405-410.	3.7	69