Patrick A Eyers

List of Publications by Year
in descending order

93 papers	8,228 citations	71102 41 h-index	53230 85 g-index
113 all docs	113 docs citations	113 times ranked	11822 citing authors

#	Article	IF	Citations
1	Drug repurposing: progress, challenges and recommendations. Nature Reviews Drug Discovery, 2019, 18, 41-58.	46.4	2,689
2	A Novel Mechanism for Activation of the Protein Kinase Aurora A. Current Biology, 2003, 13, 691-697.	3.9	331
3	Conversion of SB 203580-insensitive MAP kinase family members to drug-sensitive forms by a single amino-acid substitution. Chemistry and Biology, 1998, 5, 321-328.	6.0	294
4	Validating Aurora B as an anti-cancer drug target. Journal of Cell Science, 2006, 119, 3664-3675.	2.0	280
5	A robust methodology to subclassify pseudokinases based on their nucleotide-binding properties. Biochemical Journal, 2014, 457, 323-334.	3.7	241
6	Paradoxical activation of Raf by a novel Raf inhibitor. Chemistry and Biology, 1999, 6, 559-568.	6.0	232
7	Tribbles in the 21st Century: The Evolving Roles of Tribbles Pseudokinases in Biology and Disease. Trends in Cell Biology, 2017, 27, 284-298.	7.9	192
8	A framework for identification of actionable cancer genome dependencies in small cell lung cancer. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17034-17039.	7.1	167
9	Local protein kinase A action proceeds through intact holoenzymes. Science, 2017, 356, 1288-1293.	12.6	165
10	Day of the dead: pseudokinases and pseudophosphatases in physiology and disease. Trends in Cell Biology, 2014, 24, 489-505.	7.9	148
11	Identification of Novel Phosphorylation Sites on Xenopus laevis Aurora A and Analysis of Phosphopeptide Enrichment by Immobilized Metal-affinity Chromatography. Molecular and Cellular Proteomics, 2003, 2, 1055-1067.	3.8	127
12	New Perspectives, Opportunities, and Challenges in Exploring the Human Protein Kinome. Cancer Research, 2018, 78, 15-29.	0.9	124
13	Strong anion exchangeâ€mediated phosphoproteomics reveals extensive human nonâ€canonical phosphorylation. EMBO Journal, 2019, 38, e100847.	7.8	118
14	Regulation of Xenopus Aurora A Activation by TPX2. Journal of Biological Chemistry, 2004, 279, 9008-9015.	3.4	115
15	VX-680 Inhibits Aurora A and Aurora B Kinase Activity in Human Cells. Cell Cycle, 2007, 6, 2846-2854.	2.6	108
16	Use of a drug-resistant mutant of stress-activated protein kinase 2a/p38 to validate the in vivo specificity of SB 203580. FEBS Letters, 1999, 451, 191-196.	2.8	106
17	Drug-Resistant Aurora A Mutants for Cellular Target Validation of the Small Molecule Kinase Inhibitors MLN8054 and MLN8237. ACS Chemical Biology, 2010, 5, 563-576.	3.4	102
18	Dawn of the dead: protein pseudokinases signal new adventures in cell biology. Biochemical Society Transactions, 2013, 41, 969-974.	3.4	93

#	Article	IF	Citations
19	Live and let die: insights into pseudoenzyme mechanisms from structure. Current Opinion in Structural Biology, 2017, 47, 95-104.	5.7	91
20	Spindle Pole Regulation by a Discrete Eg5-Interacting Domain in TPX2. Current Biology, 2008, 18, 519-525.	3.9	90
21	A single sulfatase is required to access colonic mucin by a gut bacterium. Nature, 2021, 598, 332-337.	27.8	87
22	Bio-Zombie: the rise of pseudoenzymes in biology. Biochemical Society Transactions, 2017, 45, 537-544.	3.4	85
23	Emerging concepts in pseudoenzyme classification, evolution, and signaling. Science Signaling, 2019, 12, .	3.6	80
24	Tracing the origin and evolution of pseudokinases across the tree of life. Science Signaling, 2019, 12, .	3.6	79
25	The evolving world of pseudoenzymes: proteins, prejudice and zombies. BMC Biology, 2016, 14, 98.	3.8	78
26	The hVps34â€•<scp>SGK</scp> 3 pathway alleviates sustained PI3K/Akt inhibition by stimulating <scp>mTORC</scp> 1 and tumourÂgrowth. EMBO Journal, 2016, 35, 1902-1922.	7.8	77
27	Characterising proteolysis during SARS-CoV-2 infection identifies viral cleavage sites and cellular targets with therapeutic potential. Nature Communications, 2021, 12, 5553.	12.8	76
28	Pseudokinases: update on their functions and evaluation as new drug targets. Future Medicinal Chemistry, 2017, 9, 245-265.	2.3	71
29	The Tribbles 2 (TRB2) pseudokinase binds to ATP and autophosphorylates in a metal-independent manner. Biochemical Journal, 2015, 467, 47-62.	3.7	70
30	Aurora A and Aurora B jointly coordinate chromosome segregation and anaphase microtubule dynamics. Journal of Cell Biology, 2011, 195, 1103-1113.	5.2	68
31	Evaluation of Parameters for Confident Phosphorylation Site Localization Using an Orbitrap Fusion Tribrid Mass Spectrometer. Journal of Proteome Research, 2017, 16, 3448-3459.	3.7	68
32	Discovery and Exploitation of Inhibitor-resistant Aurora and Polo Kinase Mutants for the Analysis of Mitotic Networks. Journal of Biological Chemistry, 2009, 284, 15880-15893.	3.4	66
33	Covalent inhibitors of EGFR family protein kinases induce degradation of human Tribbles 2 (TRIB2) pseudokinase in cancer cells. Science Signaling, 2018, 11, .	3.6	66
34	Aurora A regulation by reversible cysteine oxidation reveals evolutionarily conserved redox control of Ser/Thr protein kinase activity. Science Signaling, 2020, 13, .	3.6	65
35	cAMP-dependent protein kinase (PKA) complexes probed by complementary differential scanning fluorimetry and ion mobilityâ€“mass spectrometry. Biochemical Journal, 2016, 473, 3159-3175.	3.7	59
36	Plk4 and Aurora A cooperate in the initiation of acentriolar spindle assembly in mammalian oocytes. Journal of Cell Biology, 2017, 216, 3571-3590.	5.2	58

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37	Spindle checkpoint proteins Mad1 and Mad2 are required for cytostatic factorâ€“mediated metaphase arrest. Journal of Cell Biology, 2003, 163, 1231-1242.	5.2	56
38	BH3-only proteins are dispensable for apoptosis induced by pharmacological inhibition of both MCL-1 and BCL-XL. Cell Death and Differentiation, 2019, 26, 1037-1047.	11.2	56
39	Phosphoregulation of human Mps1 kinase. Biochemical Journal, 2009, 417, 173-184.	3.7	52
40	Metabolic control of BRISCâ€“SHMT2 assembly regulates immune signalling. Nature, 2019, 570, 194-199.	27.8	51
41	Crystal Structure of the Catalytic Domain of the Mitotic Checkpoint Kinase Mps1 in Complex with SP600125. Journal of Biological Chemistry, 2008, 283, 21495-21500.	3.4	50
42	KinView: a visual comparative sequence analysis tool for integrated kinome research. Molecular BioSystems, 2016, 12, 3651-3665.	2.9	47
43	Regulation of System A amino acid transport in L6 rat skeletal muscle cells by insulin, chemical and hyperthermic stress. FEBS Letters, 1998, 441, 15-19.	2.8	46
44	Covalent Aurora A regulation by the metabolic integrator coenzyme A. Redox Biology, 2020, 28, 101318.	9.0	45
45	TD-60 links RalA GTPase function to the CPC in mitosis. Nature Communications, 2015, 6, 7678.	12.8	43
46	Rigorous determination of the stoichiometry of protein phosphorylation using mass spectrometry. Journal of the American Society for Mass Spectrometry, 2009, 20, 2211-2220.	2.8	40
47	The Aurora A and Aurora B Protein Kinases: A Single Amino Acid Difference Controls Intrinsic Activity and Activation by TPX2. Cell Cycle, 2005, 4, 784-789.	2.6	39
48	Regulation of the G2/M Transition in Xenopus Oocytes by the cAMP-dependent Protein Kinase. Journal of Biological Chemistry, 2005, 280, 24339-24346.	3.4	36
49	Understanding proteinâ€“drug interactions using ion mobilityâ€“mass spectrometry. Current Opinion in Chemical Biology, 2018, 42, 167-176.	6.1	36
50	Biophysical and X-ray Crystallographic Analysis of Mps1 Kinase Inhibitor Complexes[,]. Biochemistry, 2010, 49, 1689-1701.	2.5	35
51	Human CDK18 promotes replication stress signaling and genome stability. Nucleic Acids Research, 2016, 44, 8772-8785.	14.5	35
52	Cataloguing the dead: breathing new life into pseudokinase research. FEBS Journal, 2020, 287, 4150-4169.	4.7	35
53	Hydrophobic Core Variations Provide a Structural Framework for Tyrosine Kinase Evolution and Functional Specialization. PLoS Genetics, 2016, 12, e1005885.	3.5	35
54	New tools for evaluating protein tyrosine sulfation: tyrosylprotein sulfotransferases (TPSTs) are novel targets for RAF protein kinase inhibitors. Biochemical Journal, 2018, 475, 2435-2455.	3.7	33

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55	Going for broke: targeting the human cancer pseudokinome. Biochemical Journal, 2015, 465, 195-211.	3.7	31
56	DRP-1 is required for BH3 mimetic-mediated mitochondrial fragmentation and apoptosis. Cell Death and Disease, 2018, 8, e2552-e2552.	6.3	29
57	Mitotic phosphotyrosine network analysis reveals that tyrosine phosphorylation regulates Polo-like kinase 1 (PLK1). Science Signaling, 2016, 9, rs14.	3.6	26
58	Use of the Polo-like kinase 4 (PLK4) inhibitor centrinone to investigate intracellular signalling networks using SILAC-based phosphoproteomics. Biochemical Journal, 2020, 477, 2451-2475.	3.7	23
59	Mps1 Phosphorylates Its N-Terminal Extension to Relieve Autoinhibition and Activate the Spindle Assembly Checkpoint. Current Biology, 2018, 28, 872-883.e5.	3.9	22
60	Protein Kinase A Is Central for Forward Transport of Two-pore Domain Potassium Channels K2P3.1 and K2P9.1. Journal of Biological Chemistry, 2011, 286, 14110-14119.	3.4	21
61	Centrin 3 is an inhibitor of centrosomal Mps1 and antagonizes centrin 2 function. Molecular Biology of the Cell, 2015, 26, 3741-3753.	2.1	19
62	Human TRIB2 Oscillates during the Cell Cycle and Promotes Ubiquitination and Degradation of CDC25C. International Journal of Molecular Sciences, 2016, 17, 1378.	4.1	19
63	Tribbles pseudokinases: novel targets for chemical biology and drug discovery?. Biochemical Society Transactions, 2015, 43, 1095-1103.	3.4	18
64	DNA Binding and Phosphorylation Regulate the Core Structure of the NF-ÎºB p50 Transcription Factor. Journal of the American Society for Mass Spectrometry, 2019, 30, 128-138.	2.8	18
65	Mislocalization of protein kinase A drives pathology in Cushingâ€™s syndrome. Cell Reports, 2022, 40, 111073.	6.4	18
66	New tools for carbohydrate sulfation analysis: heparan sulfate 2-O-sulfotransferase (HS2ST) is a target for small-molecule protein kinase inhibitors. Biochemical Journal, 2021, 475, 2417-2433.	3.7	17
67	The Resistance Tetrad. Methods in Enzymology, 2014, 548, 117-146.	1.0	16
68	Sulfated glycan recognition by carbohydrate sulfatases of the human gut microbiota. Nature Chemical Biology, 2022, 18, 841-849.	8.0	16
69	TRIBBLES: A Twist in the Pseudokinase Tail. Structure, 2015, 23, 1974-1976.	3.3	15
70	Trib2 expression in granulocyte-monocyte progenitors drives a highly drug resistant acute myeloid leukaemia linked to elevated Bcl2. Oncotarget, 2018, 9, 14977-14992.	1.8	15
71	Profiling the Human Phosphoproteome to Estimate the True Extent of Protein Phosphorylation. Journal of Proteome Research, 2022, 21, 1510-1524.	3.7	15
72	Regulating the Regulators: Aurora A Activation and Mitosis. Cell Cycle, 2003, 2, 286-288.	2.6	14

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73	KinOrtho: a method for mapping human kinase orthologs across the tree of life and illuminating understudied kinases. BMC Bioinformatics, 2021, 22, 446.	2.6	13
74	A redox-active switch in fructosamine-3-kinases expands the regulatory repertoire of the protein kinase superfamily. Science Signaling, 2020, 13, .	3.6	12
75	Kinomeâ€wide transcriptional profiling of uveal melanoma reveals new vulnerabilities to targeted therapeutics. Pigment Cell and Melanoma Research, 2018, 31, 253-266.	3.3	11
76	Towards 20,20-difluorinated bryostatin: synthesis and biological evaluation of C17,C27-fragments. Organic and Biomolecular Chemistry, 2019, 17, 1487-1505.	2.8	10
77	Mobility shift-based electrophoresis coupled with fluorescent detection enables real-time enzyme analysis of carbohydrate sulfatase activity. Biochemical Journal, 2021, 478, 735-748.	3.7	6
78	A new consensus for evaluating <scp>CDKL</scp> 5/ <scp>STK</scp> 9â€dependent signalling mechanisms. EMBO Journal, 2018, 37, .	7.8	5
79	Structure-based design of nucleoside-derived analogues as sulfotransferase inhibitors. RSC Advances, 2019, 9, 32165-32173.	3.6	5
80	Marveling at the Incredible ULK4. Structure, 2020, 28, 1181-1183.	3.3	5
81	â€˜Up with the LRRKâ€™: a phosphorylated Rab10 assay for evaluation of LRRK2 activity and inhibitor engagement. Biochemical Journal, 2016, 473, 2757-2762.	3.7	4
82	Back to the future: new target-validated Rab antibodies for evaluating LRRK2 signalling in cell biology and Parkinson's disease. Biochemical Journal, 2018, 475, 185-189.	3.7	4
83	Computational tools and resources for pseudokinase research. Methods in Enzymology, 2022, 667, 403-426.	1.0	4
84	Biochemical Analysis of AKAP-Anchored PKA Signaling Complexes. Methods in Molecular Biology, 2022, 2483, 297-317.	0.9	4
85	Analysis of human Tribbles 2 (TRIB2) pseudokinase. Methods in Enzymology, 2022, 667, 79-99.	1.0	4
86	Autophosphorylation Is a Mechanism of Inhibition in Twitchin Kinase. Journal of Molecular Biology, 2018, 430, 793-805.	4.2	3
87	Exploring the Conformational Landscape and Stability of Aurora A Using Ion-Mobility Mass Spectrometry and Molecular Modeling. Journal of the American Society for Mass Spectrometry, 2022, 33, 420-435.	2.8	3
88	Determination of Phosphohistidine Stoichiometry in Histidine Kinases by Intact Mass Spectrometry. Methods in Molecular Biology, 2020, 2077, 83-91.	0.9	1
89	Analysis of 1- and 3-Phosphohistidine (pHis) Protein Modification Using Model Enzymes Expressed in Bacteria. Methods in Molecular Biology, 2020, 2077, 63-81.	0.9	1
90	Rheostat-ing Mitosis. Chemistry and Biology, 2013, 20, 142-143.	6.0	0

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91	Elucidation and Therapeutic Targeting Of The Molecular Mechanism Of TRIB2-Mediated Acute Myeloid Leukaemia. Blood, 2013, 122, 3792-3792.	1.4	0
92	Elucidation and Therapeutic Targeting Of The Molecular Mechanism Of TRIB2-Mediated Acute Myeloid Leukaemia. Blood, 2013, 122, 3799-3799.	1.4	0
93	Correction: Mobility shift-based electrophoresis coupled with fluorescent detection enables real-time enzyme analysis of carbohydrate sulfatase activity. Biochemical Journal, 2021, 478, 2537-2538.	3.7	0