Titus J Boggon

List of Publications by Year in descending order

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130 papers	29,521 citations	25034 57 h-index	14208 128 g-index
132 all docs	132 docs citations	132 times ranked	34190 citing authors

#	Article	IF	Citations
1	EGFR Mutations in Lung Cancer: Correlation with Clinical Response to Gefitinib Therapy. Science, 2004, 304, 1497-1500.	12.6	9,038
2	EGFRMutation and Resistance of Nonâ€“Small-Cell Lung Cancer to Gefitinib. New England Journal of Medicine, 2005, 352, 786-792.	27.0	3,715
3	Activating mutation in the tyrosine kinase JAK2 in polycythemia vera, essential thrombocythemia, and myeloid metaplasia with myelofibrosis. Cancer Cell, 2005, 7, 387-397.	16.8	2,695
4	Exome sequencing identifies recurrent somatic RAC1 mutations in melanoma. Nature Genetics, 2012, 44, 1006-1014.	21.4	1,052
5	Activation of the AXL kinase causes resistance to EGFR-targeted therapy in lung cancer. Nature Genetics, 2012, 44, 852-860.	21.4	1,049
6	Structures of Lung Cancer-Derived EGFR Mutants and Inhibitor Complexes: Mechanism of Activation and Insights into Differential Inhibitor Sensitivity. Cancer Cell, 2007, 11, 217-227.	16.8	933
7	Tyrosine Phosphorylation Inhibits PKM2 to Promote the Warburg Effect and Tumor Growth. Science Signaling, 2009, 2, ra73.	3.6	632
8	C-Cadherin Ectodomain Structure and Implications for Cell Adhesion Mechanisms. Science, 2002, 296, 1308-1313.	12.6	616
9	Structure and regulation of Src family kinases. Oncogene, 2004, 23, 7918-7927.	5.9	588
10	BIM Mediates EGFR Tyrosine Kinase Inhibitor-Induced Apoptosis in Lung Cancers with Oncogenic EGFR Mutations. PLoS Medicine, 2007, 4, e315.	8.4	444
11	Mutation of NLRC4 causes a syndrome of enterocolitis and autoinflammation. Nature Genetics, 2014, 46, 1135-1139.	21.4	417
12	G-Protein Signaling Through Tubby Proteins. Science, 2001, 292, 2041-2050.	12.6	352
13	Genomic landscape of cutaneous T cell lymphoma. Nature Genetics, 2015, 47, 1011-1019.	21.4	347
14	Phosphoglycerate Mutase 1 Coordinates Glycolysis and Biosynthesis to Promote Tumor Growth. Cancer Cell, 2012, 22, 585-600.	16.8	329
15	Activating alleles of JAK3 in acute megakaryoblastic leukemia. Cancer Cell, 2006, 10, 65-75.	16.8	295
16	Tyrosine Phosphorylation of Mitochondrial Pyruvate Dehydrogenase Kinase 1 Is Important for Cancer Metabolism. Molecular Cell, 2011, 44, 864-877.	9.7	278
17	Landscape of somatic single-nucleotide and copy-number mutations in uterine serous carcinoma. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2916-2921.	7.1	275
18	Glutamate Dehydrogenase 1 Signals through Antioxidant Glutathione Peroxidase 1 to Regulate Redox Homeostasis and Tumor Growth. Cancer Cell, 2015, 27, 257-270.	16.8	269

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19	Structure and Clinical Relevance of the Epidermal Growth Factor Receptor in Human Cancer. Journal of Clinical Oncology, 2008, 26, 1742-1751.	1.6	267
20	Tyr Phosphorylation of PDP1 Toggles Recruitment between ACAT1 and SIRT3 to Regulate the Pyruvate Dehydrogenase Complex. Molecular Cell, 2014, 53, 534-548.	9.7	247
21	6-Phosphogluconate dehydrogenase links oxidative PPP, lipogenesis and tumour growth by inhibiting LKB1â€“AMPK signalling. Nature Cell Biology, 2015, 17, 1484-1496.	10.3	224
22	Tyrosine Phosphorylation of Lactate Dehydrogenase A Is Important for NADH/NAD⁺ Redox Homeostasis in Cancer Cells. Molecular and Cellular Biology, 2011, 31, 4938-4950.	2.3	193
23	Mutational landscape of uterine and ovarian carcinosarcomas implicates histone genes in epithelialâ€“mesenchymal transition. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12238-12243.	7.1	181
24	Identification of Driver and Passenger Mutations of FLT3 by High-Throughput DNA Sequence Analysis and Functional Assessment of Candidate Alleles. Cancer Cell, 2007, 12, 501-513.	16.8	174
25	EGFR-mutated lung cancer: a paradigm of molecular oncology. Oncotarget, 2010, 1, 497-514.	1.8	159
26	Crystal structure of the Jak3 kinase domain in complex with a staurosporine analog. Blood, 2005, 106, 996-1002.	1.4	158
27	Mineralocorticoid Receptor Phosphorylation Regulates Ligand Binding and Renal Response to Volume Depletion and Hyperkalemia. Cell Metabolism, 2013, 18, 660-671.	16.2	152
28	Stabilization of VEGFR2 Signaling by Cerebral Cavernous Malformation 3 Is Critical for Vascular Development. Science Signaling, 2010, 3, ra26.	3.6	148
29	RAC1 ^{P29S} is a spontaneously activating cancer-associated GTPase. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 912-917.	7.1	146
30	Recessive loss of function of the neuronal ubiquitin hydrolase UCHL1 leads to early-onset progressive neurodegeneration. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3489-3494.	7.1	144
31	Genomic analysis of 220 CTCLs identifies a novel recurrent gain-of-function alteration in RLTPR (p.Q575E). Blood, 2017, 130, 1430-1440.	1.4	131
32	Metabolic Rewiring by Oncogenic BRAF V600E Links Ketogenesis Pathway to BRAF-MEK1 Signaling. Molecular Cell, 2015, 59, 345-358.	9.7	125
33	Data publication with the structural biology data grid supports live analysis. Nature Communications, 2016, 7, 10882.	12.8	113
34	Lysine Acetylation Activates 6-Phosphogluconate Dehydrogenase to Promote Tumor Growth. Molecular Cell, 2014, 55, 552-565.	9.7	107
35	JAK2T875N is a novel activating mutation that results in myeloproliferative disease with features of megakaryoblastic leukemia in a murine bone marrow transplantation model. Blood, 2006, 108, 2770-2779.	1.4	104
36	MAST1 Drives Cisplatin Resistance in Human Cancers by Rewiring cRaf-Independent MEK Activation. Cancer Cell, 2018, 34, 315-330.e7.	16.8	94

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37	Identification of a Major Determinant for Serine-Threonine Kinase Phosphoacceptor Specificity. Molecular Cell, 2014, 53, 140-147.	9.7	91
38	Cerebral cavernous malformation proteins at a glance. Journal of Cell Science, 2014, 127, 701-7.	2.0	89
39	Structural and numerical variation of FLT3/ITD in pediatric AML. Blood, 2008, 111, 4930-4933.	1.4	86
40	Genetic Abnormalities of the EGFR Pathway in African American Patients With Nonâ€“Small-Cell Lung Cancer. Journal of Clinical Oncology, 2009, 27, 5620-5626.	1.6	85
41	Identifying and characterizing a novel activating mutation of the FLT3 tyrosine kinase in AML. Blood, 2004, 104, 1855-1858.	1.4	80
42	Structure of the EF-hand domain of polycystin-2 suggests a mechanism for Ca ²⁺ -dependent regulation of polycystin-2 channel activity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9176-9181.	7.1	78
43	Screening for phasing atoms in protein crystallography. Structure, 2000, 8, R143-R149.	3.3	77
44	JAK3: A two-faced player in hematological disorders. International Journal of Biochemistry and Cell Biology, 2009, 41, 2376-2379.	2.8	76
45	Mechanism for KRIT1 Release of ICAP1-Mediated Suppression of Integrin Activation. Molecular Cell, 2013, 49, 719-729.	9.7	76
46	Crystal Structure of CCM3, a Cerebral Cavernous Malformation Protein Critical for Vascular Integrity. Journal of Biological Chemistry, 2010, 285, 24099-24107.	3.4	75
47	Tyr26 phosphorylation of PGAM1 provides a metabolic advantage to tumours by stabilizing the active conformation. Nature Communications, 2013, 4, 1790.	12.8	75
48	The structural basis of integrin-linked kinaseâ€“PINCH interactions. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20677-20682.	7.1	74
49	Type II p21-activated kinases (PAKs) are regulated by an autoinhibitory pseudosubstrate. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16107-16112.	7.1	73
50	Tetrameric Acetyl-CoA Acetyltransferase 1 Is Important for Tumor Growth. Molecular Cell, 2016, 64, 859-874.	9.7	73
51	A Network of Interactions Enables CCM3 and STK24 to Coordinate UNC13D-Driven Vesicle Exocytosis in Neutrophils. Developmental Cell, 2013, 27, 215-226.	7.0	70
52	Domain Mapping of the Polycystin-2 C-terminal Tail Using de Novo Molecular Modeling and Biophysical Analysis. Journal of Biological Chemistry, 2008, 283, 28305-28312.	3.4	69
53	Structure and vascular function of MEKK3â€“cerebral cavernous malformations 2 complex. Nature Communications, 2015, 6, 7937.	12.8	69
54	Signaling pathways and the cerebral cavernous malformations proteins: lessons from structural biology. Cellular and Molecular Life Sciences, 2014, 71, 1881-1892.	5.4	67

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55	Asymmetric receptor contact is required for tyrosine autophosphorylation of fibroblast growth factor receptor in living cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2866-2871.	7.1	66
56	Resistance to an Irreversible Epidermal Growth Factor Receptor (EGFR) Inhibitor in EGFR-Mutant Lung Cancer Reveals Novel Treatment Strategies. Cancer Research, 2007, 67, 10417-10427.	0.9	63
57	Tyr-301 Phosphorylation Inhibits Pyruvate Dehydrogenase by Blocking Substrate Binding and Promotes the Warburg Effect. Journal of Biological Chemistry, 2014, 289, 26533-26541.	3.4	61
58	Differential binding to the ILK complex determines kindlin isoform adhesion localization and integrin activation. Journal of Cell Science, 2014, 127, 4308-21.	2.0	60
59	Fibroblast Growth Factor Receptor 3 Associates with and Tyrosine Phosphorylates p90 RSK2, Leading to RSK2 Activation That Mediates Hematopoietic Transformation. Molecular and Cellular Biology, 2009, 29, 2105-2117.	2.3	53
60	Targeting 6-phosphogluconate dehydrogenase in the oxidative PPP sensitizes leukemia cells to antimalarial agent dihydroartemisinin. Oncogene, 2017, 36, 254-262.	5.9	53
61	Whole-exome sequencing of cervical carcinomas identifies activating ERBB2 and PIK3CA mutations as targets for combination therapy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22730-22736.	7.1	52
62	Signaling, Regulation, and Specificity of the Type II p21-activated Kinases. Journal of Biological Chemistry, 2015, 290, 12975-12983.	3.4	51
63	Tyr-94 Phosphorylation Inhibits Pyruvate Dehydrogenase Phosphatase 1 and Promotes Tumor Growth. Journal of Biological Chemistry, 2014, 289, 21413-21422.	3.4	50
64	The Use of Structural Biology in Janus Kinase Targeted Drug Discovery. Current Drug Targets, 2011, 12, 546-555.	2.1	49
65	Integrated genomic analyses of cutaneous T-cell lymphomas reveal the molecular bases for disease heterogeneity. Blood, 2021, 138, 1225-1236.	1.4	49
66	Structural Basis for Small G Protein Effector Interaction of Ras-related Protein 1 (Rap1) and Adaptor Protein Krev Interaction Trapped 1 (KRIT1). Journal of Biological Chemistry, 2012, 287, 22317-22327.	3.4	46
67	CCM2â€“CCM3 interaction stabilizes their protein expression and permits endothelial network formation. Journal of Cell Biology, 2015, 208, 987-1001.	5.2	46
68	Recurrent recessive mutation in deoxyguanosine kinase causes idiopathic noncirrhotic portal hypertension. Hepatology, 2016, 63, 1977-1986.	7.3	46
69	Bound-solvent structures for microgravity-, ground control-, gel- and microbatch-grown hen egg-white lysozyme crystals at 1.8 Å... resolution. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 745-752.	2.5	45
70	Calcium-induced Conformational Changes in C-terminal Tail of Polycystin-2 Are Necessary for Channel Gating. Journal of Biological Chemistry, 2012, 287, 17232-17240.	3.4	45
71	<scp>MERTK</scp> controls melanoma cell migration and survival and differentially regulates cell behavior relative to <scp>AXL</scp>. Pigment Cell and Melanoma Research, 2013, 26, 527-541.	3.3	44
72	Identification of <scp>PLX</scp>4032â€resistance mechanisms and implications for novel <scp>RAF</scp> inhibitors. Pigment Cell and Melanoma Research, 2014, 27, 253-262.	3.3	44

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73	Structural Basis for Noncanonical Substrate Recognition of Cofilin/ADF Proteins by LIM Kinases. Molecular Cell, 2016, 62, 397-408.	9.7	44
74	Global Analysis of Human Nonreceptor Tyrosine Kinase Specificity Using High-Density Peptide Microarrays. Journal of Proteome Research, 2014, 13, 4339-4346.	3.7	42
75	The crystal structure of pseudokinase PEAK1 (Sugen kinase 269) reveals an unusual catalytic cleft and a novel mode of kinase fold dimerization. Journal of Biological Chemistry, 2018, 293, 1642-1650.	3.4	42
76	Comprehensive profiling of the STE20 kinase family defines features essential for selective substrate targeting and signaling output. PLoS Biology, 2019, 17, e2006540.	5.6	41
77	Î³-6-Phosphogluconolactone, a Byproduct of the Oxidative Pentose Phosphate Pathway, Contributes to AMPK Activation through Inhibition of PP2A. Molecular Cell, 2019, 76, 857-871.e9.	9.7	39
78	Structural Basis for the Disruption of the Cerebral Cavernous Malformations 2 (CCM2) Interaction with Krev Interaction Trapped 1 (KRIT1) by Disease-associated Mutations. Journal of Biological Chemistry, 2015, 290, 2842-2853.	3.4	37
79	Molecular Recognition of Leucine-Aspartate Repeat (LD) Motifs by the Focal Adhesion Targeting Homology Domain of Cerebral Cavernous Malformation 3 (CCM3). Journal of Biological Chemistry, 2011, 286, 26138-26147.	3.4	35
80	Structural studies of cerebral cavernous malformations 2 (CCM2) reveal a folded helical domain at its Câ€terminus. FEBS Letters, 2013, 587, 272-277.	2.8	35
81	Structural Basis for Paxillin Binding and Focal Adhesion Targeting of Î²-Parvin. Journal of Biological Chemistry, 2012, 287, 32566-32577.	3.4	33
82	Mutations in ILK, encoding integrin-linked kinase, are associated with arrhythmogenic cardiomyopathy. Translational Research, 2019, 208, 15-29.	5.0	33
83	Cisplatin-mediated activation of glucocorticoid receptor induces platinum resistance via MAST1. Nature Communications, 2021, 12, 4960.	12.8	32
84	Constrained chromatin accessibility in PU.1-mutated agammaglobulinemia patients. Journal of Experimental Medicine, 2021, 218, .	8.5	31
85	Analysis of the cytoplasmic interaction between polycystin-1 and polycystin-2. American Journal of Physiology - Renal Physiology, 2009, 297, F1310-F1315.	2.7	30
86	CDC42 binds PAK4 via an extended GTPase-effector interface. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 531-536.	7.1	29
87	p90 RSK2 Mediates Antianoikis Signals by both Transcription-Dependent and -Independent Mechanisms. Molecular and Cellular Biology, 2013, 33, 2574-2585.	2.3	28
88	The Strength and Cooperativity of KIT Ectodomain Contacts Determine Normal Ligand-Dependent Stimulation or Oncogenic Activation in Cancer. Molecular Cell, 2015, 57, 191-201.	9.7	26
89	Structural basis for KIT receptor tyrosine kinase inhibition by antibodies targeting the D4 membrane-proximal region. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17832-17837.	7.1	25
90	Mutations in TFAP2B and previously unimplicated genes of the BMP, Wnt, and Hedgehog pathways in syndromic craniosynostosis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15116-15121.	7.1	24

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91	Structural Determinants for Binding of Sorting Nexin 17 (SNX17) to the Cytoplasmic Adaptor Protein Krev Interaction Trapped 1 (KRIT1). Journal of Biological Chemistry, 2014, 289, 25362-25373.	3.4	23
92	PAK6 targets to cell-cell adhesions via its N-terminus in a Cdc42-dependent manner to drive epithelial colony escape. Journal of Cell Science, 2016, 129, 380-93.	2.0	23
93	p190RhoGAP proteins contain pseudoGTPase domains. Nature Communications, 2017, 8, 506.	12.8	21
94	SH2 Domain Binding: Diverse FLVRs of Partnership. Frontiers in Endocrinology, 2020, 11, 575220.	3.5	20
95	Structural basis of competition between PINCH1 and PINCH2 for binding to the ankyrin repeat domain of integrin-linked kinase. Journal of Structural Biology, 2010, 170, 157-163.	2.8	19
96	Substrate and Inhibitor Specificity of the Type II p21-Activated Kinase, PAK6. PLoS ONE, 2013, 8, e77818.	2.5	19
97	Discovery and Functional Validation of Novel Pediatric Specific FLT3 Activating Mutations in Acute Myeloid Leukemia: Results from the COG/NCI Target Initiative. Blood, 2015, 126, 87-87.	1.4	19
98	Mutant and Wild-Type Isocitrate Dehydrogenase 1 Share Enhancing Mechanisms Involving Distinct Tyrosine Kinase Cascades in Cancer. Cancer Discovery, 2019, 9, 756-777.	9.4	18
99	Disruption of the EGFR E884â€“R958 ion pair conserved in the human kinome differentially alters signaling and inhibitor sensitivity. Oncogene, 2009, 28, 518-533.	5.9	17
100	AIP1 Expression in Tumor Niche Suppresses Tumor Progression and Metastasis. Cancer Research, 2015, 75, 3492-3504.	0.9	14
101	The pseudoGTPase group of pseudoenzymes. FEBS Journal, 2020, 287, 4232-4245.	4.7	14
102	Structure-guided studies of the SHP-1/JAK1 interaction provide new insights into phosphatase catalytic domain substrate recognition. Journal of Structural Biology, 2013, 181, 243-251.	2.8	13
103	Crystal structures of p120RasGAP N-terminal SH2 domain in its apo form and in complex with a p190RhoGAP phosphotyrosine peptide. PLoS ONE, 2019, 14, e0226113.	2.5	13
104	Two Amino Acid Residues Confer Different Binding Affinities of Abelson Family Kinase Src Homology 2 Domains for Phosphorylated Cortactin. Journal of Biological Chemistry, 2014, 289, 19704-19713.	3.4	12
105	Structural analysis of the KRIT1 ankyrin repeat and FERM domains reveals a conformationally stable ARDâ€“FERM interface. Journal of Structural Biology, 2015, 192, 449-456.	2.8	12
106	Purification and SAXS Analysis of the Integrin Linked Kinase, PINCH, Parvin (IPP) Heterotrimeric Complex. PLoS ONE, 2013, 8, e55591.	2.5	12
107	Lysozyme contamination facilitates crystallization of a heterotrimeric cortactinâ€“Argâ€“lysozyme complex. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 154-158.	0.7	11
108	Cocrystal structure of the ICAP1 PTB domain in complex with a KRIT1 peptide. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 494-498.	0.7	11

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109	PAK4 crystal structures suggest unusual kinase conformational movements. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 356-365.	2.3	11
110	Apocrustacyanin C1crystals grown in space and on earth using vapour-diffusion geometry: protein structure refinements and electron-density map comparisons. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 1117-1123.	2.5	10
111	The N-Terminal GTPase Domain of p190RhoGAP Proteins Is a PseudoGTPase. Structure, 2018, 26, 1451-1461.e4.	3.3	10
112	Lysine acetylation restricts mutant IDH2 activity to optimize transformation in AML cells. Molecular Cell, 2021, 81, 3833-3847.e11.	9.7	10
113	The repeat region of cortactin is intrinsically disordered in solution. Scientific Reports, 2017, 7, 16696.	3.3	9
114	Tousled-like kinase 2 targets ASF1 histone chaperones through client mimicry. Nature Communications, 2022, 13, 749.	12.8	9
115	The GTPase-activating protein p120RasGAP has an evolutionarily conserved â€œFLVR-uniqueâ€•SH2 domain. Journal of Biological Chemistry, 2020, 295, 10511-10521.	3.4	8
116	The cerebral cavernous malformations proteins. Oncotarget, 2015, 6, 32279-32280.	1.8	8
117	Automated Protein Crystallization Trials Using the Thermo Scientific Matrix Hydra II eDrop. Journal of the Association for Laboratory Automation, 2007, 12, 213-218.	2.8	7
118	Structure of the ABL2/ARG kinase in complex with dasatinib. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 443-448.	0.8	7
119	PseudoGTPase domains in p190RhoGAP proteins: a mini-review. Biochemical Society Transactions, 2018, 46, 1713-1720.	3.4	7
120	Recognition of physiological phosphorylation sites by p21-activated kinase 4. Journal of Structural Biology, 2020, 211, 107553.	2.8	7
121	SHP Family Protein Tyrosine Phosphatases Adopt Canonical Active-Site Conformations in the Apo and Phosphate-Bound States. Protein and Peptide Letters, 2013, 20, 1039-1048.	0.9	7
122	Lyso-PAF, a biologically inactive phospholipid, contributes to RAF1 activation. Molecular Cell, 2022, 82, 1992-2005.e9.	9.7	5
123	Jak3 Kinase Domain Crystal Structures and Implications for Jak-Specific Drug Design.. Blood, 2005, 106, 69-69.	1.4	3
124	Identification of Driver and Passenger Mutations of FLT3 by High-Throughput DNA Sequence Analysis and Functional Assessment of Candidate Alleles.. Blood, 2007, 110, 206-206.	1.4	2
125	Purification, crystallization and initial X-ray analysis of the C1subunit of the astaxanthin protein, V600,of the chondrophoreVelella velella. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 266-268.	2.5	1
126	Clamping Together Hemidesmosomes and Latching Them in Place. Structure, 2019, 27, 881-883.	3.3	1

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127	Phosphoglycerate Mutase 1 Promotes Leukemia Metabolism by Coordinating Glycolysis and Biosynthesis, and Represnts a Therapuetic Target in Leukemia Treatment. Blood, 2012, 120, 860-860.	1.4	1
128	Crystallographic Studies of the Cerebral Cavernous Malformations Proteins. Methods in Molecular Biology, 2020, 2152, 291-302.	0.9	1
129	ARGuing for a new kinase class. Nature Chemical Biology, 2019, 15, 431-432.	8.0	0
130	Leukemogenic Tyrosine Kinases Inhibit PKM2 to Promote the Warburg Effect and Tumor Growth. Blood, 2010, 116, 3142-3142.	1.4	0