Zhimin Lu

List of Publications by Year
in descending order

97 papers	11,468 citations	36303 51 h-index	33894 99 g-index
102 all docs	102 docs citations	102 times ranked	15856 citing authors

#	Article	IF	Citations
1	Nuclear PKM2 regulates Î²-catenin transactivation upon EGFR activation. Nature, 2011, 480, 118-122.	27.8	834
2	Phosphorylation of Î²-Catenin by AKT Promotes Î²-Catenin Transcriptional Activity. Journal of Biological Chemistry, 2007, 282, 11221-11229.	3.4	740
3	ERK1/2-dependent phosphorylation and nuclear translocation of PKM2 promotes the Warburg effect. Nature Cell Biology, 2012, 14, 1295-1304.	10.3	693
4	PKM2 Phosphorylates Histone H3 and Promotes Gene Transcription and Tumorigenesis. Cell, 2012, 150, 685-696.	28.9	635
5	ERK1/2 MAP kinases in cell survival and apoptosis. IUBMB Life, 2006, 58, 621-631.	3.4	549
6	Lipid metabolism and cancer. Journal of Experimental Medicine, 2021, 218, .	8.5	337
7	Mitochondria-Translocated PGK1 Functions as a Protein Kinase to Coordinate Glycolysis and the TCA Cycle in Tumorigenesis. Molecular Cell, 2016, 61, 705-719.	9.7	319
8	Activation of Protein Kinase C Triggers Its Ubiquitination and Degradation. Molecular and Cellular Biology, 1998, 18, 839-845.	2.3	302
9	KAT2A coupled with the Î±-KGDH complex acts as a histone H3 succinyltransferase. Nature, 2017, 552, 273-277.	27.8	301
10	Regulation of chromatin and gene expression by metabolic enzymes and metabolites. Nature Reviews Molecular Cell Biology, 2018, 19, 563-578.	37.0	297
11	EGF-Induced ERK Activation Promotes CK2-Mediated Disassociation of Î±-Catenin from Î²-Catenin and Transactivation of Î²-Catenin. Molecular Cell, 2009, 36, 547-559.	9.7	237
12	Nucleus-Translocated ACSS2 Promotes Gene Transcription for Lysosomal Biogenesis and Autophagy. Molecular Cell, 2017, 66, 684-697.e9.	9.7	227
13	EGFR-Induced and PKCÎµ Monoubiquitylation-Dependent NF-Î°B Activation Upregulates PKM2 Expression and Promotes Tumorigenesis. Molecular Cell, 2012, 48, 771-784.	9.7	205
14	Ubiquitylation and proteasomal degradation of the p21^{Cip1}, p27^{Kip1}and p57^{Kip2}CDK inhibitors. Cell Cycle, 2010, 9, 2342-2352.	2.6	204
15	PKM2 Regulates Chromosome Segregation and Mitosis Progression of Tumor Cells. Molecular Cell, 2014, 53, 75-87.	9.7	194
16	Stabilization of phosphofructokinase 1 platelet isoform by AKT promotes tumorigenesis. Nature Communications, 2017, 8, 949.	12.8	191
17	Phosphoglycerate Kinase 1 Phosphorylates Beclin1 to Induce Autophagy. Molecular Cell, 2017, 65, 917-931.e6.	9.7	190
18	Nuclear PKM2 regulates the Warburg effect. Cell Cycle, 2013, 12, 3343-3347.	2.6	176

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19	Metabolic Kinases Moonlighting as Protein Kinases. Trends in Biochemical Sciences, 2018, 43, 301-310.	7.5	173
20	The gluconeogenic enzyme PCK1 phosphorylates INSIG1/2 for lipogenesis. Nature, 2020, 580, 530-535.	27.8	171
21	TCR Repertoire Diversity of Peripheral PD-1+CD8+ T Cells Predicts Clinical Outcomes after Immunotherapy in Patients with Nonâ€“Small Cell Lung Cancer. Cancer Immunology Research, 2020, 8, 146-154.	3.4	166
22	Regulation and function of pyruvate kinase M2 in cancer. Cancer Letters, 2013, 339, 153-158.	7.2	159
23	Local generation of fumarate promotes DNA repair through inhibition of histone H3 demethylation. Nature Cell Biology, 2015, 17, 1158-1168.	10.3	154
24	Pyruvate kinase M2 at a glance. Journal of Cell Science, 2015, 128, 1655-60.	2.0	150
25	Prolyl isomerase Pin1 in cancer. Cell Research, 2014, 24, 1033-1049.	12.0	149
26	A splicing switch from ketohexokinase-C to ketohexokinase-A drives hepatocellular carcinomaÂformation. Nature Cell Biology, 2016, 18, 561-571.	10.3	143
27	FAK Phosphorylation by ERK Primes Ras-Induced Tyrosine Dephosphorylation of FAK Mediated by PIN1 and PTP-PEST. Molecular Cell, 2009, 35, 11-25.	9.7	141
28	Engineered algae: A novel oxygen-generating system for effective treatment of hypoxic cancer. Science Advances, 2020, 6, eaba5996.	10.3	138
29	PKM2 dephosphorylation by Cdc25A promotes the Warburg effect and tumorigenesis. Nature Communications, 2016, 7, 12431.	12.8	131
30	Tissue-specific isoform switch and DNA hypomethylation of the pyruvate kinase PKM gene in human cancers. Oncotarget, 2014, 5, 8202-8210.	1.8	127
31	Degradation of Activated Protein Kinases by Ubiquitination. Annual Review of Biochemistry, 2009, 78, 435-475.	11.1	126
32	EGFR-Phosphorylated Platelet Isoform of Phosphofructokinase 1 Promotes PI3K Activation. Molecular Cell, 2018, 70, 197-210.e7.	9.7	116
33	Tumour suppressor TRIM33 targets nuclear Î²-catenin degradation. Nature Communications, 2015, 6, 6156.	12.8	114
34	TSPAN8 promotes cancer cell stemness via activation of sonic Hedgehog signaling. Nature Communications, 2019, 10, 2863.	12.8	114
35	PTEN Suppresses Glycolysis by Dephosphorylating and Inhibiting Autophosphorylated PGK1. Molecular Cell, 2019, 76, 516-527.e7.	9.7	113
36	PKM2 phosphorylates MLC2 and regulates cytokinesis of tumour cells. Nature Communications, 2014, 5, 5566.	12.8	108

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37	Î²-Catenin induces transcriptional expression of PD-L1 to promote glioblastoma immune evasion. Journal of Experimental Medicine, 2020, 217, .	8.5	108
38	Programmable base editing of mutated TERT promoter inhibits brain tumour growth. Nature Cell Biology, 2020, 22, 282-288.	10.3	96
39	KDM3A Senses Oxygen Availability to Regulate PGC-1Î±-Mediated Mitochondrial Biogenesis. Molecular Cell, 2019, 76, 885-895.e7.	9.7	93
40	The Evolving Landscape of Noncanonical Functions of Metabolic Enzymes in Cancer and Other Pathologies. Cell Metabolism, 2021, 33, 33-50.	16.2	93
41	Protein kinase activity of the glycolytic enzyme PGK1 regulates autophagy to promote tumorigenesis. Autophagy, 2017, 13, 1246-1247.	9.1	79
42	Metabolic features of cancer cells. Cancer Communications, 2018, 38, 1-6.	9.2	77
43	WNT/Î²-catenin-suppressed FTO expression increases m6A of c-Myc mRNA to promote tumor cell glycolysis and tumorigenesis. Cell Death and Disease, 2021, 12, 462.	6.3	75
44	SUCLA2-coupled regulation of GLS succinylation and activity counteracts oxidative stress in tumor cells. Molecular Cell, 2021, 81, 2303-2316.e8.	9.7	74
45	METTL3 promotes tumour development by decreasing APC expression mediated by APC mRNA N6-methyladenosine-dependent YTHDF binding. Nature Communications, 2021, 12, 3803.	12.8	74
46	Ras-Induced and Extracellular Signal-Regulated Kinase 1 and 2 Phosphorylation-Dependent Isomerization of Protein Tyrosine Phosphatase (PTP)-PEST by PIN1 Promotes FAK Dephosphorylation by PTP-PEST. Molecular and Cellular Biology, 2011, 31, 4258-4269.	2.3	73
47	Cancer metabolism and tumor microenvironment: fostering each other?. Science China Life Sciences, 2022, 65, 236-279.	4.9	68
48	c-Jun Downregulation by HDAC3-Dependent Transcriptional Repression Promotes Osmotic Stress-Induced Cell Apoptosis. Molecular Cell, 2007, 25, 219-232.	9.7	67
49	Nuclear PGK1 Alleviates ADP-Dependent Inhibition of CDC7 to Promote DNA Replication. Molecular Cell, 2018, 72, 650-660.e8.	9.7	57
50	Choline kinase alpha 2 acts as a protein kinase to promote lipolysis of lipid droplets. Molecular Cell, 2021, 81, 2722-2735.e9.	9.7	57
51	PGK1 is a new member of the protein kinome. Cell Cycle, 2016, 15, 1803-1804.	2.6	55
52	Local histone acetylation by ACSS2 promotes gene transcription for lysosomal biogenesis and autophagy. Autophagy, 2017, 13, 1790-1791.	9.1	54
53	Mir-21â€“Sox2 Axis Delineates Glioblastoma Subtypes with Prognostic Impact. Journal of Neuroscience, 2015, 35, 15097-15112.	3.6	53
54	Conversion of PRPS Hexamer to Monomer by AMPK-Mediated Phosphorylation Inhibits Nucleotide Synthesis in Response to Energy Stress. Cancer Discovery, 2018, 8, 94-107.	9.4	53

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55	Epidermal Growth Factor (EGF)-enhanced Vascular Cell Adhesion Molecule-1 (VCAM-1) Expression Promotes Macrophage and Glioblastoma Cell Interaction and Tumor Cell Invasion. Journal of Biological Chemistry, 2013, 288, 31488-31495.	3.4	52
56	The protein kinase activity of fructokinase A specifies the antioxidant responses of tumor cells by phosphorylating p62. Science Advances, 2019, 5, eaav4570.	10.3	52
57	Secreted and O-GlcNAcylated MIF binds to the human EGF receptor and inhibits its activation. Nature Cell Biology, 2015, 17, 1348-1355.	10.3	51
58	KAT2A succinyltransferase activity-mediated 14-3-3Î¶ upregulation promotes Î²-catenin stabilization-dependent glycolysis and proliferation of pancreatic carcinoma cells. Cancer Letters, 2020, 469, 1-10.	7.2	50
59	Metabolomics profiling in plasma samples from glioma patients correlates with tumor phenotypes. Oncotarget, 2016, 7, 20486-20495.	1.8	49
60	Wnt-independent beta-catenin transactivation in tumor development. Cell Cycle, 2004, 3, 571-3.	2.6	41
61	Protein Tyrosine Phosphatase-PEST and Î²8 Integrin Regulate Spatiotemporal Patterns of RhoGDI1 Activation in Migrating Cells. Molecular and Cellular Biology, 2015, 35, 1401-1413.	2.3	38
62	Nonmetabolic functions of pyruvate kinase isoform M2 in controlling cell cycle progression and tumorigenesis. Chinese Journal of Cancer, 2013, 32, 5-7.	4.9	38
63	Regulation of gene expression by glycolytic and gluconeogenic enzymes. Trends in Cell Biology, 2022, 32, 786-799.	7.9	38
64	Defective Replication Stress Response Is Inherently Linked to the Cancer Stem Cell Phenotype. Cell Reports, 2018, 23, 2095-2106.	6.4	37
65	TIE2-mediated tyrosine phosphorylation of H4 regulates DNA damage response by recruiting ABL1. Science Advances, 2016, 2, e1501290.	10.3	33
66	ATF5 Connects the Pericentriolar Materials to the Proximal End of the Mother Centriole. Cell, 2015, 162, 580-592.	28.9	31
67	PPARÎ³ maintains the metabolic heterogeneity and homeostasis of renal tubules. EBioMedicine, 2018, 38, 178-190.	6.1	29
68	EGFR phosphorylates FAM129B to promote Ras activation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 644-649.	7.1	27
69	RNF8 mediates histone H3 ubiquitylation and promotes glycolysis and tumorigenesis. Journal of Experimental Medicine, 2017, 214, 1843-1855.	8.5	27
70	Methionine Adenosyltransferase Î±1 Is Targeted to the Mitochondrial Matrix and Interacts with Cytochrome P450 2E1 to Lower Its Expression. Hepatology, 2019, 70, 2018-2034.	7.3	27
71	PKM2 functions as a histone kinase. Cell Cycle, 2012, 11, 4101-4102.	2.6	26
72	A newly discovered role of metabolic enzyme PCK1 as a protein kinase to promote cancer lipogenesis. Cancer Communications, 2020, 40, 389-394.	9.2	25

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73	Fructokinase A acts as a protein kinase to promote nucleotide synthesis. Cell Cycle, 2016, 15, 2689-2690.	2.6	25
74	Supramolecular assembly of KAT2A with succinyl-CoA for histone succinylation. Cell Discovery, 2018, 4, 47.	6.7	23
75	Associations of PGK1 promoter hypomethylation and PGK1â€mediated PDHK1 phosphorylation with cancer stage and prognosis: a TCGA panâ€cancer analysis. Cancer Communications, 2019, 39, 1-17.	9.2	23
76	HPD degradation regulated by the TTC36-STK33-PELI1 signaling axis induces tyrosinemia and neurological damage. Nature Communications, 2019, 10, 4266.	12.8	22
77	Mistletoe extract Fraxini inhibits the proliferation of liver cancer by down-regulating c-Myc expression. Scientific Reports, 2019, 9, 6428.	3.3	21
78	Prognostic Impact of Metabolism Reprogramming Markers Acetyl-CoA Synthetase 2 Phosphorylation and Ketohexokinase-A Expression in Non-Small-Cell Lung Carcinoma. Frontiers in Oncology, 2019, 9, 1123.	2.8	21
79	Phosphofructokinase 1 Platelet Isoform Promotes Î²-Catenin Transactivation for Tumor Development. Frontiers in Oncology, 2020, 10, 211.	2.8	19
80	The NFÎºB inhibitor, SN50, induces differentiation of glioma stem cells and suppresses their oncogenic phenotype. Cancer Biology and Therapy, 2014, 15, 602-611.	3.4	18
81	Bioinspired Tumor Calcification Enables Early Detection and Elimination of Lung Cancer. Advanced Functional Materials, 2021, 31, 2101284.	14.9	18
82	Fructose and fructose kinase in cancer and other pathologies. Journal of Genetics and Genomics, 2021, 48, 531-539.	3.9	17
83	Interrelationships of Circulating Tumor Cells with Metastasis and Thrombosis: Role of MicroRNAs. Current Pharmaceutical Design, 2014, 20, 5298-5308.	1.9	15
84	Mitochondrial DNA copy number in whole blood and glioma risk: A case control study. Molecular Carcinogenesis, 2016, 55, 2089-2094.	2.7	14
85	Prognostic Impact of PCK1 Protein Kinase Activity-Dependent Nuclear SREBP1 Activation in Non-Small-Cell Lung Carcinoma. Frontiers in Oncology, 2021, 11, 561247.	2.8	13
86	Glutamine synthetase licenses APC/C-mediated mitotic progression to drive cell growth. Nature Metabolism, 2022, 4, 239-253.	11.9	13
87	Identification of a novel non-ATP-competitive protein kinase inhibitor of PGK1 from marine nature products. Biochemical Pharmacology, 2021, 183, 114343.	4.4	12
88	Association of phosphoenolpyruvate carboxykinase 1 protein kinase activity-dependent sterol regulatory element-binding protein 1 activation with prognosis of oesophageal carcinoma. European Journal of Cancer, 2021, 142, 123-131.	2.8	11
89	Coupling HDAC4 with transcriptional factor MEF2D abrogates SPRY4-mediated suppression of ERK activation and elicits hepatocellular carcinoma drug resistance. Cancer Letters, 2021, 520, 243-254.	7.2	8
90	PGK1-coupled HSP90 stabilizes GSK3Î² expression to regulate the stemness of breast cancer stem cells. Cancer Biology and Medicine, 2021, 19, 486-503.	3.0	8

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91	Protein modifications throughout the lung cancer proteome unravel the cancer-specific regulation of glycolysis. Cell Reports, 2021, 37, 110137.	6.4	8
92	A moonlighting function of choline kinase alpha 2 in the initiation of lipid droplet lipolysis in cancer cells. Cancer Communications, 2021, 41, 933-936.	9.2	6
93	Chemotherapy with or without autologous cytokine-induced killer cell transfusion as the first-line treatment for stage IV gastrointestinal cancer: a phase II clinical trial. Journal of Cancer Research and Clinical Oncology, 2016, 142, 1315-1323.	2.5	5
94	Governing glutaminolysis by regulation of glutaminase succinylation. Protein and Cell, 2022, 13, 163-166.	11.0	5
95	FAM129B activates Ras and promotes aerobic glycolysis. Cell Cycle, 2016, 15, 1391-1392.	2.6	4
96	Choline Kinase Alpha2 Promotes Lipid Droplet Lipolysis in Non-Small-Cell Lung Carcinoma. Frontiers in Oncology, 2022, 12, 848483.	2.8	1
97	MEKK1: Dual Function as a Protein Kinase and a Ubiquitin Protein Ligase. , 0, , 79-87.		0