Jared Rutter

List of Publications by Year
in descending order

103 papers	9,132 citations	57758 44 h-index	43889 91 g-index
123 all docs	123 docs citations	123 times ranked	12132 citing authors

#	Article	IF	Citations
1	A Mitochondrial Pyruvate Carrier Required for Pyruvate Uptake in Yeast, <i>Drosophila</i> , and Humans. Science, 2012, 337, 96-100.	12.6	694
2	<i>SDH5</i> , a Gene Required for Flavination of Succinate Dehydrogenase, Is Mutated in Paraganglioma. Science, 2009, 325, 1139-1142.	12.6	682
3	Glutamine Oxidation Maintains the TCA Cycle and Cell Survival during Impaired Mitochondrial Pyruvate Transport. Molecular Cell, 2014, 56, 414-424.	9.7	504
4	NPAS2: A Gas-Responsive Transcription Factor. Science, 2002, 298, 2385-2387.	12.6	429
5	Metabolism and the Control of Circadian Rhythms. Annual Review of Biochemistry, 2002, 71, 307-331.	11.1	361
6	Succinate dehydrogenase â€“ Assembly, regulation and role in human disease. Mitochondrion, 2010, 10, 393-401.	3.4	313
7	Targeting a ceramide double bond improves insulin resistance and hepatic steatosis. Science, 2019, 365, 386-392.	12.6	304
8	A Role for the Mitochondrial Pyruvate Carrier as a Repressor of the Warburg Effect and Colon Cancer Cell Growth. Molecular Cell, 2014, 56, 400-413.	9.7	294
9	A Stress-Responsive System for Mitochondrial Protein Degradation. Molecular Cell, 2010, 40, 465-480.	9.7	275
10	Efficient gene targeting in <i>Drosophila</i> by direct embryo injection with zinc-finger nucleases. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19821-19826.	7.1	270
11	Control of intestinal stem cell function and proliferation by mitochondrial pyruvate metabolism. Nature Cell Biology, 2017, 19, 1027-1036.	10.3	238
12	Impaired Cued and Contextual Memory in NPAS2-Deficient Mice. Science, 2000, 288, 2226-2230.	12.6	216
13	Lactate dehydrogenase activity drives hair follicle stem cell activation. Nature Cell Biology, 2017, 19, 1017-1026.	10.3	203
14	Identification of a Protein Mediating Respiratory Supercomplex Stability. Cell Metabolism, 2012, 15, 348-360.	16.2	195
15	Hepatic Mitochondrial Pyruvate Carrier 1 Is Required for Efficient Regulation of Gluconeogenesis and Whole-Body Glucose Homeostasis. Cell Metabolism, 2015, 22, 669-681.	16.2	193
16	Global Analysis of Plasma Lipids Identifies Liver-Derived Acylcarnitines as a Fuel Source for Brown Fat Thermogenesis. Cell Metabolism, 2017, 26, 509-522.e6.	16.2	185
17	<scp>M</scp>sp1/<scp>ATAD</scp>1 maintains mitochondrial function by facilitating the degradation of mislocalized tailâ€anchored proteins. EMBO Journal, 2014, 33, 1548-1564.	7.8	172
18	Mitochondrial quality control by the ubiquitinâ€“proteasome system. Biochemical Society Transactions, 2011, 39, 1509-1513.	3.4	168

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19	Hallmarks of a new era in mitochondrial biochemistry. Genes and Development, 2013, 27, 2615-2627.	5.9	146
20	The mitochondrial acyl carrier protein (ACP) coordinates mitochondrial fatty acid synthesis with iron sulfur cluster biogenesis. ELife, 2016, 5, .	6.0	141
21	Structure and Interactions of PAS Kinase N-Terminal PAS Domain. Structure, 2002, 10, 1349-1361.	3.3	140
22	The pyruvate-lactate axis modulates cardiac hypertrophy and heart failure. Cell Metabolism, 2021, 33, 629-648.e10.	16.2	137
23	Structure of human Feâ€"S assembly subcomplex reveals unexpected cysteine desulfurase architecture and acyl-ACPâ€"ISD11 interactions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5325-E5334.	7.1	132
24	Evidence of Glycolysis Up-Regulation andÂPyruvate Mitochondrial Oxidation Mismatch During Mechanical Unloading ofÂthe Failing Human Heart. JACC Basic To Translational Science, 2016, 1, 432-444.	4.1	105
25	Pyruvate and Metabolic Flexibility: Illuminating a Path Toward Selective Cancer Therapies. Trends in Biochemical Sciences, 2016, 41, 219-230.	7.5	104
26	Regulation of Tumor Initiation by the Mitochondrial Pyruvate Carrier. Cell Metabolism, 2020, 31, 284-300.e7.	16.2	103
27	Coordinate Regulation of Sugar Flux and Translation by PAS Kinase. Cell, 2002, 111, 17-28.	28.9	99
28	Whence cometh the allosterome?. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10533-10535.	7.1	99
29	The LYR Factors SDHAF1 and SDHAF3 Mediate Maturation of the Iron-Sulfur Subunit of Succinate Dehydrogenase. Cell Metabolism, 2014, 20, 253-266.	16.2	96
30	SDHAF4 Promotes Mitochondrial Succinate Dehydrogenase Activity and Prevents Neurodegeneration. Cell Metabolism, 2014, 20, 241-252.	16.2	88
31	Protein-mediated assembly of succinate dehydrogenase and its cofactors. Critical Reviews in Biochemistry and Molecular Biology, 2015, 50, 168-180.	5.2	87
32	Mitochondrial pyruvate carriers are required for myocardial stress adaptation. Nature Metabolism, 2020, 2, 1248-1264.	11.9	87
33	Vms1p is a release factor for the ribosome-associated quality control complex. Nature Communications, 2018, 9, 2197.	12.8	80
34	ACP Acylation Is an Acetyl-CoA-Dependent Modification Required for Electron Transport Chain Assembly. Molecular Cell, 2018, 71, 567-580.e4.	9.7	71
35	Involvement of Per-Arnt-Sim (PAS) kinase in the stimulation of preproinsulin and pancreatic duodenum homeobox 1 gene expression by glucose. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8319-8324.	7.1	66
36	Mitochondrial PE potentiates respiratory enzymes to amplify skeletal muscle aerobic capacity. Science Advances, 2019, 5, eaax8352.	10.3	66

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37	PAS kinase is required for normal cellular energy balance. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15466-15471.	7.1	65
38	Impact of Mitochondrial Fatty Acid Synthesis onÂMitochondrial Biogenesis. Current Biology, 2018, 28, R1212-R1219.	3.9	64
39	Ubiquitin-dependent mitochondrial protein degradation. International Journal of Biochemistry and Cell Biology, 2011, 43, 1422-1426.	2.8	63
40	Mitochondrial fatty acid synthesis coordinates oxidative metabolism in mammalian mitochondria. ELife, 2020, 9, .	6.0	62
41	The long and winding road to the mitochondrial pyruvate carrier. Cancer & Metabolism, 2013, 1, 6.	5.0	61
42	Involvement of Per-Arnt-Sim Kinase and Extracellular-Regulated Kinases-1/2 in Palmitate Inhibition of Insulin Gene Expression in Pancreatic Î²-Cells. Diabetes, 2009, 58, 2048-2058.	0.6	55
43	The Role of Nonglycolytic Glucose Metabolism in Myocardial Recovery Upon Mechanical Unloading and Circulatory Support in Chronic Heart Failure. Circulation, 2020, 142, 259-274.	1.6	53
44	Control of mammalian glycogen synthase by PAS kinase. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16596-16601.	7.1	48
45	Regulation of Glucose Partitioning by PAS Kinase and Ugp1 Phosphorylation. Molecular Cell, 2007, 26, 491-499.	9.7	48
46	Revealing the Allosterome: Systematic Identification of Metaboliteâ€"Protein Interactions. Biochemistry, 2012, 51, 225-232.	2.5	48
47	Mitochondrial pyruvate carrier is required for optimal brown fat thermogenesis. ELife, 2020, 9, .	6.0	45
48	Yeast PAS kinase coordinates glucose partitioning in response to metabolic and cell integrity signaling. EMBO Journal, 2007, 26, 4824-4830.	7.8	44
49	EWS/FLI is a Master Regulator of Metabolic Reprogramming in Ewing Sarcoma. Molecular Cancer Research, 2017, 15, 1517-1530.	3.4	39
50	Activation of PASK by mTORC1 is required for the onset of the terminal differentiation program. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10382-10391.	7.1	39
51	Reign in the membrane: How common lipids govern mitochondrial function. Current Opinion in Cell Biology, 2020, 63, 162-173.	5.4	39
52	PAS Kinase Drives Lipogenesis through SREBP-1 Maturation. Cell Reports, 2014, 8, 242-255.	6.4	37
53	The role of PAS kinase in regulating energy metabolism. IUBMB Life, 2008, 60, 204-209.	3.4	35
54	Mitochondrial Pyruvate Carrier 1 Promotes Peripheral T Cell Homeostasis through Metabolic Regulation of Thymic Development. Cell Reports, 2020, 30, 2889-2899.e6.	6.4	34

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55	Sterol Oxidation Mediates Stress-Responsive Vms1 Translocation to Mitochondria. Molecular Cell, 2017, 68, 673-685.e6.	9.7	33
56	Chronic cold exposure enhances glucose oxidation in brown adipose tissue. EMBO Reports, 2020, 21, e50085.	4.5	33
57	The Force Is Strong with This One: Metabolism (Over)powers Stem Cell Fate. Trends in Cell Biology, 2018, 28, 551-559.	7.9	32
58	Intramolecular interactions control Vms1 translocation to damaged mitochondria. Molecular Biology of the Cell, 2013, 24, 1263-1273.	2.1	31
59	Pancreatic and duodenal homeobox 1 (PDX1) phosphorylation at serine-269 is HIPK2-dependent and affects PDX1 subnuclear localization. Biochemical and Biophysical Research Communications, 2010, 399, 155-161.	2.1	30
60	20,000 picometers under the <scp>OMM</scp>: diving into the vastness of mitochondrial metabolite transport. EMBO Reports, 2020, 21, e50071.	4.5	29
61	The biochemical basis of mitochondrial dysfunction in Zellweger Spectrum Disorder. EMBO Reports, 2021, 22, e51991.	4.5	27
62	Structural Bases of PAS Domain-regulated Kinase (PASK) Activation in the Absence of Activation Loop Phosphorylation. Journal of Biological Chemistry, 2010, 285, 41034-41043.	3.4	26
63	Power2: The power of yeast genetics applied to the powerhouse of the cell. Trends in Endocrinology and Metabolism, 2015, 26, 59-68.	7.1	25
64	A metabolic switch controls intestinal differentiation downstream of Adenomatous polyposis coli (APC). ELife, 2017, 6, .	6.0	23
65	Human Mutation within Per-Arnt-Sim (PAS) Domain-containing Protein Kinase (PASK) Causes Basal Insulin Hypersecretion*. Journal of Biological Chemistry, 2011, 286, 44005-44014.	3.4	21
66	Mitochondria link metabolism and epigenetics in haematopoiesis. Nature Cell Biology, 2017, 19, 589-591.	10.3	21
67	Oct1/Pou2f1 is selectively required for colon regeneration and regulates colon malignancy. PLoS Genetics, 2019, 15, e1007687.	3.5	21
68	Paradoxical neuronal hyperexcitability in a mouse model of mitochondrial pyruvate import deficiency. ELife, 2022, 11, .	6.0	21
69	The Role of PAS Kinase in PASsing the Glucose Signal. Sensors, 2010, 10, 5668-5682.	3.8	19
70	Crystal structure and interaction studies of human DHTKD1 provide insight into a mitochondrial megacomplex in lysine catabolism. IUCrJ, 2020, 7, 693-706.	2.2	19
71	T Cellâ€"Expressed microRNA-155 Reduces Lifespan in a Mouse Model of Age-Related Chronic Inflammation. Journal of Immunology, 2020, 204, 2064-2075.	0.8	18
72	Sugar phosphate activation of the stress sensor eIF2B. Nature Communications, 2021, 12, 3440.	12.8	17

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73	Loss of p16INK4A stimulates aberrant mitochondrial biogenesis through a CDK4/Rb-independent pathway. Oncotarget, 2017, 8, 55848-55862.	1.8	17
74	Protective mitochondrial fission induced by stress-responsive protein GJA1-20k. ELife, 2021, 10, .	6.0	17
75	Per-Arnt-Sim Kinase Regulates Pancreatic Duodenal Homeobox-1 Protein Stability via Phosphorylation of Glycogen Synthase Kinase 3Î² in Pancreatic Î²-Cells. Journal of Biological Chemistry, 2013, 288, 24825-24833.	3.4	16
76	Pask integrates hormonal signaling with histone modification via Wdr5 phosphorylation to drive myogenesis. ELife, 2016, 5, .	6.0	16
77	XPRESSyourself: Enhancing, standardizing, and automating ribosome profiling computational analyses yields improved insight into data. PLoS Computational Biology, 2020, 16, e1007625.	3.2	15
78	You Down With ETC? Yeah, You Know D!. Cell, 2015, 162, 471-473.	28.9	14
79	Regulation and function of yeast PAS kinase: A role in the maintenance of cellular integrity. Cell Cycle, 2009, 8, 1824-1832.	2.6	13
80	PAS kinase: Integrating nutrient sensing with nutrient partitioning. Seminars in Cell and Developmental Biology, 2012, 23, 626-630.	5.0	13
81	PAS Kinase Promotes Cell Survival and Growth Through Activation of Rho1. Science Signaling, 2012, 5, ra9.	3.6	12
82	Identification of specific metabolic pathways as druggable targets regulating the sensitivity to cyanide poisoning. PLoS ONE, 2018, 13, e0193889.	2.5	12
83	AMERSHAM BIOSCIENCES AND SCIENCE PRIZE: ESSAYS ON SCIENCE AND SOCIETY: PAS Domains and Metabolic Status Signaling. Science, 2002, 298, 1567-1568.	12.6	10
84	The Whole (Cell) Is Less Than the Sum of Its Parts. Cell, 2016, 166, 1078-1079.	28.9	10
85	Compartment and hub definitions tune metabolic networks for metabolomic interpretations. GigaScience, 2020, 9, .	6.4	9
86	Dosage suppression of theKluyveromyces lactiszymocin bySaccharomyces cerevisiae ISR1andUGP1. FEMS Yeast Research, 2007, 7, 722-730.	2.3	8
87	Validation of PAS Kinase, a Regulator of Hepatic Fatty Acid and Triglyceride Synthesis, as a Therapeutic Target for Nonalcoholic Steatohepatitis. Hepatology Communications, 2020, 4, 696-707.	4.3	8
88	Identification of small molecule allosteric modulators of 5,10-methylenetetrahydrofolate reductase (MTHFR) by targeting its unique regulatory domain. Biochimie, 2021, 183, 100-107.	2.6	8
89	Revealing human disease genes through analysis of the yeast mitochondrial proteome. Cell Cycle, 2009, 8, 4007-4008.	2.6	7
90	Callyspongiolide Is a Potent Inhibitor of the Vacuolar ATPase. Journal of Natural Products, 2020, 83, 3381-3386.	3.0	6

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91	Metabolic decisions in development and diseaseâ€"a Keystone Symposia report. Annals of the New York Academy of Sciences, 2021, 1506, 55-73.	3.8	6
92	Maestro of the SereNADe: SLC25A51 Orchestrates Mitochondrial NAD+. Trends in Biochemical Sciences, 2021, 46, 348-350.	7.5	5
93	Glyoxylate protects against cyanide toxicity through metabolic modulation. Scientific Reports, 2022, 12, 4982.	3.3	4
94	Proliferation and Metabolism: It's as Easy as APC. Cell Metabolism, 2012, 15, 413-414.	16.2	2
95	You Are What You Eatâ€¦ or Are You?. Developmental Cell, 2016, 36, 483-485.	7.0	2
96	Pressing Mitochondrial Genetics Forward. Cell Reports, 2014, 7, 599-600.	6.4	1
97	A time to build and a time to burn: glucose metabolism for every season. Molecular Cell, 2021, 81, 642-644.	9.7	1
98	PAS kinase and the maintenance of energy homeostasis. FASEB Journal, 2007, 21, A206.	0.5	0
99	Exploring the functional role of an ancient mitochondrial fatty acid synthesis pathway. FASEB Journal, 2019, 33, 660.5.	0.5	0
100	Title is missing!. , 2020, 16, e1007625.		0
101	Title is missing!. , 2020, 16, e1007625.		0
102	Title is missing!. , 2020, 16, e1007625.		0
103	Title is missing!. , 2020, 16, e1007625.		0