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	Paradoxical neuronal hyperexcitability in a mouse model of mitochondrial pyruvate import deficiency. ELife, 2022, 11, .	6.0	21
2	Glyoxylate protects against cyanide toxicity through metabolic modulation. Scientific Reports, 2022, 12, 4982.	3.3	4
3	The pyruvate-lactate axis modulates cardiac hypertrophy and heart failure. Cell Metabolism, 2021, 33, 629-648.e10.	16.2	137
4	A time to build and a time to burn: glucose metabolism for every season. Molecular Cell, 2021, 81, 642-644.	9.7	1
5	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
6	Maestro of the SereNADe: SLC25A51 Orchestrates Mitochondrial NAD+. Trends in Biochemical Sciences, 2021, 46, 348-350.	7.5	5
7	Sugar phosphate activation of the stress sensor eIF2B. Nature Communications, 2021, 12, 3440.	12.8	17
8	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
9	The biochemical basis of mitochondrial dysfunction in Zellweger Spectrum Disorder. EMBO Reports, 2021, 22, e51991.	4.5	27
10	Protective mitochondrial fission induced by stress-responsive protein GJA1-20k. ELife, 2021, 10, .	6.0	17
11	Regulation of Tumor Initiation by the Mitochondrial Pyruvate Carrier. Cell Metabolism, 2020, 31, 284-300.e7.	16.2	103
12	Mitochondrial pyruvate carriers are required for myocardial stress adaptation. Nature Metabolism, 2020, 2, 1248-1264.	11.9	87
13	Callyspongiolide Is a Potent Inhibitor of the Vacuolar ATPase. Journal of Natural Products, 2020, 83, 3381-3386.	3.0	6
14	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
15	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
16	20,000 picometers under the <scp>OMM</scp>: diving into the vastness of mitochondrial metabolite transport. EMBO Reports, 2020, 21, e50071.	4.5	29
17	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
18	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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19	Reign in the membrane: How common lipids govern mitochondrial function. Current Opinion in Cell Biology, 2020, 63, 162-173.	5.4	39
20	XPRESSyourself: Enhancing, standardizing, and automating ribosome profiling computational analyses yields improved insight into data. PLoS Computational Biology, 2020, 16, e1007625.	3.2	15
21	Compartment and hub definitions tune metabolic networks for metabolomic interpretations. GigaScience, 2020, 9, .	6.4	9
22	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
23	Chronic cold exposure enhances glucose oxidation in brown adipose tissue. EMBO Reports, 2020, 21, e50085.	4.5	33
24	Mitochondrial pyruvate carrier is required for optimal brown fat thermogenesis. ELife, 2020, 9, .	6.0	45
25	Mitochondrial fatty acid synthesis coordinates oxidative metabolism in mammalian mitochondria. ELife, 2020, 9, .	6.0	62
26	Title is missing!. , 2020, 16, e1007625.		0
27	Title is missing!. , 2020, 16, e1007625.		0
28	Title is missing!. , 2020, 16, e1007625.		0
29	Title is missing!. , 2020, 16, e1007625.		0
30	Targeting a ceramide double bond improves insulin resistance and hepatic steatosis. Science, 2019, 365, 386-392.	12.6	304
31	Mitochondrial PE potentiates respiratory enzymes to amplify skeletal muscle aerobic capacity. Science Advances, 2019, 5, eaax8352.	10.3	66
32	Oct1/Pou2f1 is selectively required for colon regeneration and regulates colon malignancy. PLoS Genetics, 2019, 15, e1007687.	3.5	21
33	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
34	Exploring the functional role of an ancient mitochondrial fatty acid synthesis pathway. FASEB Journal, 2019, 33, 660.5.	0.5	0
35	The Force Is Strong with This One: Metabolism (Over)powers Stem Cell Fate. Trends in Cell Biology, 2018, 28, 551-559.	7.9	32
36	Impact of Mitochondrial Fatty Acid Synthesis onÂMitochondrial Biogenesis. Current Biology, 2018, 28, R1212-R1219.	3.9	64

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37	ACP Acylation Is an Acetyl-CoA-Dependent Modification Required for Electron Transport Chain Assembly. Molecular Cell, 2018, 71, 567-580.e4.	9.7	71
38	Identification of specific metabolic pathways as druggable targets regulating the sensitivity to cyanide poisoning. PLoS ONE, 2018, 13, e0193889.	2.5	12
39	Vms1p is a release factor for the ribosome-associated quality control complex. Nature Communications, 2018, 9, 2197.	12.8	80
40	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
41	Mitochondria link metabolism and epigenetics in haematopoiesis. Nature Cell Biology, 2017, 19, 589-591.	10.3	21
42	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
43	EWS/FLI is a Master Regulator of Metabolic Reprogramming in Ewing Sarcoma. Molecular Cancer Research, 2017, 15, 1517-1530.	3.4	39
44	Lactate dehydrogenase activity drives hair follicle stem cell activation. Nature Cell Biology, 2017, 19, 1017-1026.	10.3	203
45	Control of intestinal stem cell function and proliferation by mitochondrial pyruvate metabolism. Nature Cell Biology, 2017, 19, 1027-1036.	10.3	238
46	Sterol Oxidation Mediates Stress-Responsive Vms1 Translocation to Mitochondria. Molecular Cell, 2017, 68, 673-685.e6.	9.7	33
47	A metabolic switch controls intestinal differentiation downstream of Adenomatous polyposis coli (APC). ELife, 2017, 6, .	6.0	23
48	Loss of p16INK4A stimulates aberrant mitochondrial biogenesis through a CDK4/Rb-independent pathway. Oncotarget, 2017, 8, 55848-55862.	1.8	17
49	The mitochondrial acyl carrier protein (ACP) coordinates mitochondrial fatty acid synthesis with iron sulfur cluster biogenesis. ELife, 2016, 5, .	6.0	141
50	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
51	The Whole (Cell) Is Less Than the Sum of Its Parts. Cell, 2016, 166, 1078-1079.	28.9	10
52	Pyruvate and Metabolic Flexibility: Illuminating a Path Toward Selective Cancer Therapies. Trends in Biochemical Sciences, 2016, 41, 219-230.	7.5	104
53	You Are What You Eatâ€¦ or Are You?. Developmental Cell, 2016, 36, 483-485.	7.0	2
54	Pask integrates hormonal signaling with histone modification via Wdr5 phosphorylation to drive myogenesis. ELife, 2016, 5, .	6.0	16

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55	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
56	You Down With ETC? Yeah, You Know D!. Cell, 2015, 162, 471-473.	28.9	14
57	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
58	Protein-mediated assembly of succinate dehydrogenase and its cofactors. Critical Reviews in Biochemistry and Molecular Biology, 2015, 50, 168-180.	5.2	87
59	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
60	<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
61	Pressing Mitochondrial Genetics Forward. Cell Reports, 2014, 7, 599-600.	6.4	1
62	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
63	Glutamine Oxidation Maintains the TCA Cycle and Cell Survival during Impaired Mitochondrial Pyruvate Transport. Molecular Cell, 2014, 56, 414-424.	9.7	504
64	PAS Kinase Drives Lipogenesis through SREBP-1 Maturation. Cell Reports, 2014, 8, 242-255.	6.4	37
65	SDHAF4 Promotes Mitochondrial Succinate Dehydrogenase Activity and Prevents Neurodegeneration. Cell Metabolism, 2014, 20, 241-252.	16.2	88
66	Hallmarks of a new era in mitochondrial biochemistry. Genes and Development, 2013, 27, 2615-2627.	5.9	146
67	The long and winding road to the mitochondrial pyruvate carrier. Cancer & Metabolism, 2013, 1, 6.	5.0	61
68	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
69	Intramolecular interactions control Vms1 translocation to damaged mitochondria. Molecular Biology of the Cell, 2013, 24, 1263-1273.	2.1	31
70	PAS Kinase Promotes Cell Survival and Growth Through Activation of Rho1. Science Signaling, 2012, 5, ra9.	3.6	12
71	A Mitochondrial Pyruvate Carrier Required for Pyruvate Uptake in Yeast, <i>Drosophila</i> , and Humans. Science, 2012, 337, 96-100.	12.6	694
72	Revealing the Allosterome: Systematic Identification of Metaboliteâ€"Protein Interactions. Biochemistry, 2012, 51, 225-232.	2.5	48

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73	Identification of a Protein Mediating Respiratory Supercomplex Stability. Cell Metabolism, 2012, 15, 348-360.	16.2	195
74	Proliferation and Metabolism: It's as Easy as APC. Cell Metabolism, 2012, 15, 413-414.	16.2	2
75	PAS kinase: Integrating nutrient sensing with nutrient partitioning. Seminars in Cell and Developmental Biology, 2012, 23, 626-630.	5.0	13
76	Ubiquitin-dependent mitochondrial protein degradation. International Journal of Biochemistry and Cell Biology, 2011, 43, 1422-1426.	2.8	63
77	Mitochondrial quality control by the ubiquitinâ€“proteasome system. Biochemical Society Transactions, 2011, 39, 1509-1513.	3.4	168
78	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
79	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
80	The Role of PAS Kinase in PASsing the Glucose Signal. Sensors, 2010, 10, 5668-5682.	3.8	19
81	Succinate dehydrogenase â€“ Assembly, regulation and role in human disease. Mitochondrion, 2010, 10, 393-401.	3.4	313
82	A Stress-Responsive System for Mitochondrial Protein Degradation. Molecular Cell, 2010, 40, 465-480.	9.7	275
83	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
84	<i>SDH5</i> , a Gene Required for Flavination of Succinate Dehydrogenase, Is Mutated in Paraganglioma. Science, 2009, 325, 1139-1142.	12.6	682
85	Revealing human disease genes through analysis of the yeast mitochondrial proteome. Cell Cycle, 2009, 8, 4007-4008.	2.6	7
86	Regulation and function of yeast PAS kinase: A role in the maintenance of cellular integrity. Cell Cycle, 2009, 8, 1824-1832.	2.6	13
87	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
88	The role of PAS kinase in regulating energy metabolism. IUBMB Life, 2008, 60, 204-209.	3.4	35
89	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
90	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

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91	Regulation of Glucose Partitioning by PAS Kinase and Ugp1 Phosphorylation. Molecular Cell, 2007, 26, 491-499.	9.7	48
92	Yeast PAS kinase coordinates glucose partitioning in response to metabolic and cell integrity signaling. EMBO Journal, 2007, 26, 4824-4830.	7.8	44
93	Dosage suppression of theKluyveromyces lactiszymocin bySaccharomyces cerevisiae ISR1andUGP1. FEMS Yeast Research, 2007, 7, 722-730.	2.3	8
94	PAS kinase and the maintenance of energy homeostasis. FASEB Journal, 2007, 21, A206.	0.5	0
95	Whence cometh the allosterome?. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10533-10535.	7.1	99
96	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
97	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
98	NPAS2: A Gas-Responsive Transcription Factor. Science, 2002, 298, 2385-2387.	12.6	429
99	AMERSHAM BIOSCIENCES AND SCIENCE PRIZE: ESSAYS ON SCIENCE AND SOCIETY: PAS Domains and Metabolic Status Signaling. Science, 2002, 298, 1567-1568.	12.6	10
100	Coordinate Regulation of Sugar Flux and Translation by PAS Kinase. Cell, 2002, 111, 17-28.	28.9	99
101	Structure and Interactions of PAS Kinase N-Terminal PAS Domain. Structure, 2002, 10, 1349-1361.	3.3	140
102	Metabolism and the Control of Circadian Rhythms. Annual Review of Biochemistry, 2002, 71, 307-331.	11.1	361
103	Impaired Cued and Contextual Memory in NPAS2-Deficient Mice. Science, 2000, 288, 2226-2230.	12.6	216