Joseph A Baur

List of Publications by Year in Descending Order

109 papers	18,930 citations	52 h-index	120 g-index
120 ext. papers	21,628 ext. citations	13.2 avg, IF	6.65 L-index

#	Paper	IF	Citations
109	Circadian REV-ERBs repress to activate NAMPT-dependent NAD biosynthesis and sustain cardiac function. **2022**, 1, 45-58		1
108	Kynurenine induces T cell fat catabolism and has limited suppressive effects in vivo. *EBioMedicine*, **2021**, 74, 103734	8.8	3
107	FoxA-dependent demethylation of DNA initiates epigenetic memory of cellular identity. *Developmental Cell*, **2021**, 56, 602-612.e4	10.2	7
106	Nicotinamide Mononucleotide Prevents Cisplatin-Induced Cognitive Impairments. *Cancer Research*, **2021**, 81, 3727-3737	10.1	3
105	SIRT3 is required for liver regeneration but not for the beneficial effect of nicotinamide riboside. *JCI Insight*, **2021**, 6,	9.9	5
104	The adverse metabolic effects of branched-chain amino acids are mediated by isoleucine and valine. *Cell Metabolism*, **2021**, 33, 905-922.e6	24.6	48
103	HDAC3 controls male fertility through enzyme-independent transcriptional regulation at the meiotic exit of spermatogenesis. *Nucleic Acids Research*, **2021**, 49, 5106-5123	20.1	1
102	Longevity pathways in stress resistance: targeting NAD and sirtuins to treat the pathophysiology of hemorrhagic shock. *GeroScience*, **2021**, 43, 1217-1228	8.9	0
101	NAD+ metabolism and cardiometabolic health: the human evidence. *Cardiovascular Research*, **2021**, 117, e106-e109	9.9	4
100	NAD flux is maintained in aged mice despite lower tissue concentrations. *Cell Systems*, **2021**,	10.6	10
99	Loss of FOXO transcription factors in the liver mitigates stress-induced hyperglycemia. *Molecular Metabolism*, **2021**, 51, 101246	8.8	5
98	Reducing NAD(H) to amplify rhythms.. *Nature Metabolism*, **2021**, 3, 1589-1590	14.6	
97	Lactate Limits T Cell Proliferation via the NAD(H) Redox State. *Cell Reports*, **2020**, 33, 108500	10.6	30
96	Tissue metabolic profiling shows that saccharopine accumulates during renal ischemic-reperfusion injury, while kynurenine and itaconate accumulate in renal allograft rejection. *Metabolomics*, **2020**, 16, 65	4.7	4
95	Age-related NAD decline. *Experimental Gerontology*, **2020**, 134, 110888	4.5	30
94	Rapamycin maintains NAD/NADH redox homeostasis in muscle cells. *Aging*, **2020**, 12, 17786-17799	5.6	8
93	Increased mTOR activity and metabolic efficiency in mouse and human cells containing the African-centric tumor-predisposing p53 variant Pro47Ser. *ELife*, **2020**, 9,	8.9	5

92	Two-Photon Autofluorescence Imaging of Fixed Tissues: Feasibility and Potential Values for Biomedical Applications. *Advances in Experimental Medicine and Biology*, **2020**, 1232, 375-381	3.6	3
91	Single-Voxel H MR spectroscopy of cerebral nicotinamide adenine dinucleotide (NAD) in humans at 7T using a 32-channel volume coil. *Magnetic Resonance in Medicine*, **2020**, 83, 806-814	4.4	7
90	mTORC1 restrains adipocyte lipolysis to prevent systemic hyperlipidemia. *Molecular Metabolism*, **2020**, 32, 136-147	8.8	9
89	CD38 ecto-enzyme in immune cells is induced during aging and regulates NAD and NMN levels. *Nature Metabolism*, **2020**, 2, 1284-1304	14.6	52
88	SLC25A51 is a mammalian mitochondrial NAD transporter. *Nature*, **2020**, 588, 174-179	50.4	55
87	Autophagy mitigates ethanol-induced mitochondrial dysfunction and oxidative stress in esophageal keratinocytes. *PLoS ONE*, **2020**, 15, e0239625	3.7	6
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83	Autophagy mitigates ethanol-induced mitochondrial dysfunction and oxidative stress in esophageal keratinocytes **2020**, 15, e0239625		
82	A PRDM16-Driven Metabolic Signal from Adipocytes Regulates Precursor Cell Fate. *Cell Metabolism*, **2019**, 30, 174-189.e5	24.6	73
81	The leptin sensitizer celastrol reduces age-associated obesity and modulates behavioral rhythms. *Aging Cell*, **2019**, 18, e12874	9.9	18
80	Blockade of MCU-Mediated Ca Uptake Perturbs Lipid Metabolism via PP4-Dependent AMPK Dephosphorylation. *Cell Reports*, **2019**, 26, 3709-3725.e7	10.6	27
79	Role of endothelial NAD deficiency in age-related vascular dysfunction. *American Journal of Physiology - Heart and Circulatory Physiology*, **2019**, 316, H1253-H1266	5.2	47
78	Optical Redox Imaging of Fixed Unstained Muscle Slides Reveals Useful Biological Information. *Molecular Imaging and Biology*, **2019**, 21, 417-425	3.8	6
77	Nicotinamide mononucleotide (NMN) supplementation rescues cerebromicrovascular endothelial function and neurovascular coupling responses and improves cognitive function in aged mice. *Redox Biology*, **2019**, 24, 101192	11.3	108
76	Telomere Dysfunction Induces Sirtuin Repression that Drives Telomere-Dependent Disease. *Cell Metabolism*, **2019**, 29, 1274-1290.e9	24.6	50
75	Hypothalamic mTORC2 is essential for metabolic health and longevity. *Aging Cell*, **2019**, 18, e13014	9.9	25

74	NAD metabolism governs the proinflammatory senescence-associated secretome. *Nature Cell Biology*, **2019**, 21, 397-407	23.4	136
73	Effect of Interleukin-15 Receptor Alpha Ablation on the Metabolic Responses to Moderate Exercise Simulated by Isometric Muscle Contractions. *Frontiers in Physiology*, **2019**, 10, 1439	4.6	4
72	Nicotinamide Improves Aspects of Healthspan, but Not Lifespan, in Mice. *Cell Metabolism*, **2018**, 27, 667-676.e4	24.6	152
71	Quantitative Analysis of NAD Synthesis-Breakdown Fluxes. *Cell Metabolism*, **2018**, 27, 1067-1080.e5	24.6	199
70	Nicotinamide adenine dinucleotide is transported into mammalian mitochondria. *ELife*, **2018**, 7,	8.9	84
69	Optical redox imaging of fixed unstained tissue slides to identify biomarkers for breast cancer diagnosis/prognosis: feasibility study.. *Proceedings of SPIE*, **2018**, 10472,	1.7	1
68	Oral nitrite restores age-dependent phenotypes in eNOS-null mice. *JCI Insight*, **2018**, 3,	9.9	8
67	Author response: Nicotinamide adenine dinucleotide is transported into mammalian mitochondria **2018**,		2
66	mTOR signaling in adipose tissue influences systemic lipid metabolism. *FASEB Journal*, **2018**, 32, 536.8	0.9	
65	NAD Intermediates: The Biology and Therapeutic Potential of NMN and NR. *Cell Metabolism*, **2018**, 27, 513-528	24.6	331
64	Aging and drug discovery. *Aging*, **2018**, 10, 3079-3088	5.6	16
63	Nicotinamide mononucleotide preserves mitochondrial function and increases survival in hemorrhagic shock. *JCI Insight*, **2018**, 3,	9.9	24
62	Foxp3 Reprograms T Cell Metabolism to Function in Low-Glucose, High-Lactate Environments. *Cell Metabolism*, **2017**, 25, 1282-1293.e7	24.6	435
61	Conditional ablation of in the male germline causes infertility due to meiotic arrest and impaired inactivation of sex chromosomes. *FASEB Journal*, **2017**, 31, 3934-3949	0.9	8
60	Histone deacetylase 3 prepares brown adipose tissue for acute thermogenic challenge. *Nature*, **2017**, 546, 544-548	50.4	88
59	Clock Regulation of Metabolites Reveals Coupling between Transcription and Metabolism. *Cell Metabolism*, **2017**, 25, 961-974.e4	24.6	96
58	Supplemental arginine vasopressin during the resuscitation of severe hemorrhagic shock preserves renal mitochondrial function. *PLoS ONE*, **2017**, 12, e0186339	3.7	9
57	The grapes and wrath: using resveratrol to treat the pathophysiology of hemorrhagic shock. *Annals of the New York Academy of Sciences*, **2017**, 1403, 70-81	6.5	7

56	Imaging Redox State in Mouse Muscles of Different Ages. *Advances in Experimental Medicine and Biology*, **2017**, 977, 51-57	3.6	1
55	Nicotinamide adenine dinucleotide biosynthesis promotes liver regeneration. *Hepatology*, **2017**, 65, 616-630	12.0	56
54	A NEET Way to Impair Mitochondrial Function in and Cells. *Diabetes*, **2016**, 65, 1484-6	0.9	1
53	Effects of Sex, Strain, and Energy Intake on Hallmarks of Aging in Mice. *Cell Metabolism*, **2016**, 23, 1093-1112	24.6	245
52	Rapamycin Blocks Induction of the Thermogenic Program in White Adipose Tissue. *Diabetes*, **2016**, 65, 927-41	0.9	50
51	A branched-chain amino acid metabolite drives vascular fatty acid transport and causes insulin resistance. *Nature Medicine*, **2016**, 22, 421-6	50.5	283
50	The tumor suppressor FLCN mediates an alternate mTOR pathway to regulate browning of adipose tissue. *Genes and Development*, **2016**, 30, 2551-2564	12.6	71
49	Loss of NAD Homeostasis Leads to Progressive and Reversible Degeneration of Skeletal Muscle. *Cell Metabolism*, **2016**, 24, 269-82	24.6	189
48	Essential role of mitochondrial energy metabolism in Foxp3+ T-regulatory cell function and allograft survival. *FASEB Journal*, **2015**, 29, 2315-26	0.9	150
47	Resveratrol activates duodenal Sirt1 to reverse insulin resistance in rats through a neuronal network. *Nature Medicine*, **2015**, 21, 498-505	50.5	102
46	Accumulation of 3-hydroxytetradecenoic acid: Cause or corollary of glucolipotoxic impairment of pancreatic cell bioenergetics?. *Molecular Metabolism*, **2015**, 4, 926-39	8.8	14
45	Resveratrol Rescues Kidney Mitochondrial Function Following Hemorrhagic Shock. *Shock*, **2015**, 44, 173-80	3.4	45
44	Purinergic glio-endothelial coupling during neuronal activity: role of P2Y1 receptors and eNOS in functional hyperemia in the mouse somatosensory cortex. *American Journal of Physiology - Heart and Circulatory Physiology*, **2015**, 309, H1837-45	5.2	54
43	Increasing NAD synthesis in muscle via nicotinamide phosphoribosyltransferase is not sufficient to promote oxidative metabolism. *Journal of Biological Chemistry*, **2015**, 290, 1546-58	5.4	60
42	Control of gluconeogenesis by metformin: does redox trump energy charge?. *Cell Metabolism*, **2014**, 20, 197-9	24.6	51
41	Resveratrol prevents high fat/sucrose diet-induced central arterial wall inflammation and stiffening in nonhuman primates. *Cell Metabolism*, **2014**, 20, 183-90	24.6	163
40	SRT2104 extends survival of male mice on a standard diet and preserves bone and muscle mass. *Aging Cell*, **2014**, 13, 787-96	9.9	158
39	Aging and sleep deprivation induce the unfolded protein response in the pancreas: implications for metabolism. *Aging Cell*, **2014**, 13, 131-41	9.9	34

38	Resveratrol ameliorates mitochondrial dysfunction but increases the risk of hypoglycemia following hemorrhagic shock. *Journal of Trauma and Acute Care Surgery*, **2014**, 77, 926-33	3.3	16
37	Extended wakefulness: compromised metabolics in and degeneration of locus ceruleus neurons. *Journal of Neuroscience*, **2014**, 34, 4418-31	6.6	95
36	Rapamycin-induced metabolic defects are reversible in both lean and obese mice. *Aging*, **2014**, 6, 742-54	5.6	53
35	Resveratrol improves adipose insulin signaling and reduces the inflammatory response in adipose tissue of rhesus monkeys on high-fat, high-sugar diet. *Cell Metabolism*, **2013**, 18, 533-45	24.6	183
34	Evaluation of resveratrol, green tea extract, curcumin, oxaloacetic acid, and medium-chain triglyceride oil on life span of genetically heterogeneous mice. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2013**, 68, 6-16	6.4	149
33	Resveratrol for primary prevention of atherosclerosis: clinical trial evidence for improved gene expression in vascular endothelium. *International Journal of Cardiology*, **2013**, 166, 246-8	3.2	96
32	Young and old genetically heterogeneous HET3 mice on a rapamycin diet are glucose intolerant but insulin sensitive. *Aging Cell*, **2013**, 12, 712-8	9.9	58
31	mTOR: more targets of resveratrol?. *Expert Reviews in Molecular Medicine*, **2013**, 15, e10	6.7	36
30	Rapalogs and mTOR inhibitors as anti-aging therapeutics. *Journal of Clinical Investigation*, **2013**, 123, 980-9	15.9	348
29	Primary respiratory chain disease causes tissue-specific dysregulation of the global transcriptome and nutrient-sensing signaling network. *PLoS ONE*, **2013**, 8, e69282	3.7	38
28	Rapamycin doses sufficient to extend lifespan do not compromise muscle mitochondrial content or endurance. *Aging*, **2013**, 5, 539-50	5.6	42
27	SIRT1 is required for AMPK activation and the beneficial effects of resveratrol on mitochondrial function. *Cell Metabolism*, **2012**, 15, 675-90	24.6	1032
26	Rapamycin-induced insulin resistance is mediated by mTORC2 loss and uncoupled from longevity. *Science*, **2012**, 335, 1638-43	33.3	829
25	Are sirtuins viable targets for improving healthspan and lifespan?. *Nature Reviews Drug Discovery*, **2012**, 11, 443-61	64.1	300
24	Challenges of translating basic research into therapeutics: resveratrol as an example. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2012**, 67, 158-67	6.4	78
23	Rapamycin has a biphasic effect on insulin sensitivity in C2C12 myotubes due to sequential disruption of mTORC1 and mTORC2. *Frontiers in Genetics*, **2012**, 3, 177	4.5	57
22	Pharmacologic Means of Extending Lifespan **2012**, Suppl 4,		4
21	Rapamycin, but not resveratrol or simvastatin, extends life span of genetically heterogeneous mice. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2011**, 66, 191-201	6.4	648

20	SRT1720 improves survival and healthspan of obese mice. *Scientific Reports*, **2011**, 1, 70	4.9	215
19	Resveratrol and life extension. *Annals of the New York Academy of Sciences*, **2011**, 1215, 138-43	6.5	126
18	Mitochondrial genome sequence analysis: a custom bioinformatics pipeline substantially improves Affymetrix MitoChip v2.0 call rate and accuracy. *BMC Bioinformatics*, **2011**, 12, 402	3.6	16
17	Resveratrol and health--a comprehensive review of human clinical trials. *Molecular Nutrition and Food Research*, **2011**, 55, 1129-41	5.9	412
16	Mitochondrial protection by resveratrol. *Exercise and Sport Sciences Reviews*, **2011**, 39, 128-32	6.7	82
15	What is new for an old molecule? Systematic review and recommendations on the use of resveratrol. *PLoS ONE*, **2011**, 6, e19881	3.7	327
14	Dietary restriction: standing up for sirtuins. *Science*, **2010**, 329, 1012-3; author reply 1013-4	33.3	56
13	Resveratrol, sirtuins, and the promise of a DR mimetic. *Mechanisms of Ageing and Development*, **2010**, 131, 261-9	5.6	172
12	Biochemical effects of SIRT1 activators. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2010**, 1804, 1626-34	4	108
11	Inhibition of mammalian S6 kinase by resveratrol suppresses autophagy. *Aging*, **2009**, 1, 515-28	5.6	130
10	Resveratrol delays age-related deterioration and mimics transcriptional aspects of dietary restriction without extending life span. *Cell Metabolism*, **2008**, 8, 157-68	24.6	949
9	What is Xenohormesis?. *American Journal of Pharmacology and Toxicology*, **2008**, 3, 152-159	0.6	22
8	SIRT1 deacetylase protects against neurodegeneration in models for Alzheimer's disease and amyotrophic lateral sclerosis. *EMBO Journal*, **2007**, 26, 3169-79	13	865
7	Design and synthesis of compounds that extend yeast replicative lifespan. *Aging Cell*, **2007**, 6, 35-43	9.9	90
6	Nutrient-sensitive mitochondrial NAD+ levels dictate cell survival. *Cell*, **2007**, 130, 1095-107	56.2	754
5	Therapeutic potential of resveratrol: the in vivo evidence. *Nature Reviews Drug Discovery*, **2006**, 5, 493-506	64.1	2806
4	Resveratrol improves health and survival of mice on a high-calorie diet. *Nature*, **2006**, 444, 337-42	50.4	3520
3	Spontaneous reactivation of a silent telomeric transgene in a human cell line. *Chromosoma*, **2004**, 112, 240-6	2.8	4

2	Characterization of ataxia telangiectasia fibroblasts with extended life-span through telomerase expression. *Oncogene*, **2001**, 20, 278-88	9.2	81
1	An alternate splicing variant of the human telomerase catalytic subunit inhibits telomerase activity. *Neoplasia*, **2000**, 2, 433-40	6.4	153