# Michael N Sack

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4028895/publications.pdf

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|---|---|---|---|
| 80 papers | 11,840 citations | 53794 45 h-index | 69250 77 g-index |
| 84 all docs | 84 docs citations | 84 times ranked | 23331 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222. | 9.1 | 4,701 |
| 2 | Mitochondrial reactive oxygen species promote production of proinflammatory cytokines and are elevated in TNFR1-associated periodic syndrome (TRAPS). Journal of Experimental Medicine, 2011, 208, 519-533. | 8.5 | 749 |
| 3 | Fatty Acid Oxidation Enzyme Gene Expression Is Downregulated in the Failing Heart. Circulation, 1996, 94, 2837-2842. | 1.6 | 574 |
| 4 | Myocardial Protection by Insulin at Reperfusion Requires Early Administration and Is Mediated via Akt and p70s6 Kinase Cell-Survival Signaling. Circulation Research, 2001, 89, 1191-1198. | 4.5 | 493 |
| 5 | Fatty liver is associated with reduced SIRT3 activity and mitochondrial protein hyperacetylation. Biochemical Journal, 2011, 433, 505-514. | 3.7 | 339 |
| 6 | Mitochondrial Function, Biology, and Role in Disease. Circulation Research, 2016, 118, 1960-1991. | 4.5 | 330 |
| 7 | Identification of a molecular component of the mitochondrial acetyltransferase programme: a novel role for GCN5L1. Biochemical Journal, 2012, 443, 655-661. | 3.7 | 184 |
| 8 | Obesity-induced lysine acetylation increases cardiac fatty acid oxidation and impairs insulin signalling. Cardiovascular Research, 2014, 103, 485-497. | 3.8 | 175 |
| 9 | Mitochondrial Metabolism, Sirtuins, and Aging. Cold Spring Harbor Perspectives in Biology, 2012, 4, a013102-a013102. | 5.5 | 174 |
| 10 | Basic Biology of Oxidative Stress and theÂCardiovascular System. Journal of the American College of Cardiology, 2017, 70, 196-211. | 2.8 | 171 |
| 11 | Parkin is a lipid-responsive regulator of fat uptake in mice and mutant human cells. Journal of Clinical Investigation, 2011, 121, 3701-3712. | 8.2 | 170 |
| 12 | Wnt Signaling Regulates Hepatic Metabolism. Science Signaling, 2011, 4, ra6. | 3.6 | 167 |
| 13 | Second signals rescue B cells from activation-induced mitochondrial dysfunction and death. Nature Immunology, 2018, 19, 871-884. | 14.5 | 166 |
| 14 | Mitochondrial depolarization and the role of uncoupling proteins in ischemia tolerance. Cardiovascular Research, 2006, 72, 210-219. | 3.8 | 157 |
| 15 | Insulin Administered at Reoxygenation Exerts a Cardioprotective Effect in Myocytes by a Possible Anti-Apoptotic Mechanism. Journal of Molecular and Cellular Cardiology, 2000, 32, 757-764. | 1.9 | 150 |
| 16 | SIRT3 is regulated by nutrient excess and modulates hepatic susceptibility to lipotoxicity. Free Radical Biology and Medicine, 2010, 49, 1230-1237. | 2.9 | 148 |
| 17 | Uncoupling Proteins 2 and 3 Function in Concert to Augment Tolerance to Cardiac Ischemia. Journal of Biological Chemistry, 2005, 280, 33470-33476. | 3.4 | 137 |
| 18 | Fasting and refeeding differentially regulate NLRP3 inflammasome activation in human subjects. Journal of Clinical Investigation, 2015, 125, 4592-4600. | 8.2 | 135 |

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|---|---|---|---|
| 19 | Characterization of the cardiac succinylome and its role in ischemiaâ€“reperfusion injury. Journal of Molecular and Cellular Cardiology, 2015, 88, 73-81. | 1.9 | 132 |
| 20 | The NAD-dependent deacetylase SIRT2 is required for programmed necrosis. Nature, 2012, 492, 199-204. | 27.8 | 131 |
| 21 | The Role of Mitochondria in the Pathophysiology of Skeletal Muscle Insulin Resistance. Endocrine Reviews, 2010, 31, 25-51. | 20.1 | 125 |
| 22 | PGC-1Î± Integrates Insulin Signaling, Mitochondrial Regulation, and Bioenergetic Function in Skeletal Muscle. Journal of Biological Chemistry, 2008, 283, 22464-22472. | 3.4 | 111 |
| 23 | Prolonged fasting suppresses mitochondrial NLRP3 inflammasome assembly and activation via SIRT3-mediated activation of superoxide dismutase 2. Journal of Biological Chemistry, 2017, 292, 12153-12164. | 3.4 | 107 |
| 24 | GCN5-like Protein 1 (GCN5L1) Controls Mitochondrial Content through Coordinated Regulation of Mitochondrial Biogenesis and Mitophagy. Journal of Biological Chemistry, 2014, 289, 2864-2872. | 3.4 | 104 |
| 25 | Metabolic Plasticity and the Promotion of Cardiac Protection in Ischemia and Ischemic Preconditioning. Journal of Molecular and Cellular Cardiology, 2002, 34, 1077-1089. | 1.9 | 99 |
| 26 | Characterization of the murine SIRT3 mitochondrial localization sequence and comparison of mitochondrial enrichment and deacetylase activity of long and short SIRT3 isoforms. Journal of Cellular Biochemistry, 2010, 110, 238-247. | 2.6 | 99 |
| 27 | Signal transducer and activator of transcription 3 is involved in the cardioprotective signalling pathway activated by insulin therapy at reperfusion. Basic Research in Cardiology, 2008, 103, 444-453. | 5.9 | 86 |
| 28 | The role of sirtuins in modulating redox stressors. Free Radical Biology and Medicine, 2012, 52, 281-290. | 2.9 | 86 |
| 29 | Restricted mitochondrial protein acetylation initiates mitochondrial autophagy. Journal of Cell Science, 2013, 126, 4843-9. | 2.0 | 85 |
| 30 | Ischemic and Pharmacological Preconditioning in Girardi Cells and C2C12 Myotubes Induce Mitochondrial Uncoupling. Circulation Research, 2001, 89, 787-792. | 4.5 | 78 |
| 31 | SIRT2 is a negative regulator of anoxiaâ€“reoxygenation tolerance via regulation of 14â€3â€3 Î¶ and BAD in H9c2 cells. FEBS Letters, 2008, 582, 2857-2862. | 2.8 | 71 |
| 32 | SIRT3â€dependent deacetylation exacerbates acetaminophen hepatotoxicity. EMBO Reports, 2011, 12, 840-846. | 4.5 | 70 |
| 33 | Network Analysis and Transcriptome Profiling Identify Autophagic and Mitochondrial Dysfunctions in SARS-CoV-2 Infection. Frontiers in Genetics, 2021, 12, 599261. | 2.3 | 64 |
| 34 | The protein acetylase GCN5L1 modulates hepatic fatty acid oxidation activity via acetylation of the mitochondrial Î²-oxidation enzyme HADHA. Journal of Biological Chemistry, 2018, 293, 17676-17684. | 3.4 | 62 |
| 35 | Delayed Ischemic Preconditioning Activates Nuclear-Encoded Electron-Transfer-Chain Gene Expression in Parallel With Enhanced Postanoxic Mitochondrial Respiratory Recovery. Circulation, 2004, 110, 534-539. | 1.6 | 59 |
| 36 | The role of SIRT3 in mitochondrial homeostasis and cardiac adaptation to hypertrophy and aging. Journal of Molecular and Cellular Cardiology, 2012, 52, 520-525. | 1.9 | 58 |

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|---|---|---|---|
| 37 | Emerging characterization of the role of SIRT3-mediated mitochondrial protein deacetylation in the heart. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H2191-H2197. | 3.2 | 56 |
| 38 | Regulation of autophagy and mitophagy by nutrient availability and acetylation. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2014, 1841, 525-534. | 2.4 | 56 |
| 39 | The Emerging Characterization of Lysine Residue Deacetylation on the Modulation of Mitochondrial Function and Cardiovascular Biology. Circulation Research, 2009, 105, 830-841. | 4.5 | 55 |
| 40 | Protein deacetylation by sirtuins: delineating a post-translational regulatory program responsive to nutrient and redox stressors. Cellular and Molecular Life Sciences, 2010, 67, 3073-3087. | 5.4 | 54 |
| 41 | The complementary and divergent roles of uncoupling proteins 1 and 3 in thermoregulation. Journal of Physiology, 2016, 594, 7455-7464. | 2.9 | 51 |
| 42 | p70s6 kinase is a functional target of insulin activated Akt cell-survival signaling. Biochemical and Biophysical Research Communications, 2004, 315, 160-165. | 2.1 | 47 |
| 43 | Type 2 diabetes, mitochondrial biology and the heart. Journal of Molecular and Cellular Cardiology, 2009, 46, 842-849. | 1.9 | 47 |
| 44 | Diazoxide-induced respiratory inhibition â€“ a putative mitochondrial KATP channel independent mechanism of pharmacological preconditioning. Molecular and Cellular Biochemistry, 2007, 294, 11-18. | 3.1 | 46 |
| 45 | Prolonged Fasting Identifies Heat Shock Protein 10 as a Sirtuin 3 Substrate. Journal of Biological Chemistry, 2015, 290, 2466-2476. | 3.4 | 46 |
| 46 | Parkin targets NOD2 to regulate astrocyte endoplasmic reticulum stress and inflammation. Glia, 2018, 66, 2427-2437. | 4.9 | 44 |
| 47 | GCN5L1/BLOS1 Links Acetylation, Organelle Remodeling, and Metabolism. Trends in Cell Biology, 2018, 28, 346-355. | 7.9 | 42 |
| 48 | GCN5L1 modulates cross-talk between mitochondria and cell signaling to regulate FoxO1 stability and gluconeogenesis. Nature Communications, 2017, 8, 523. | 12.8 | 41 |
| 49 | Increased Mitochondrial Biogenesis and Reactive Oxygen Species Production Accompany Prolonged CD4+ T Cell Activation. Journal of Immunology, 2018, 201, 3294-3306. | 0.8 | 39 |
| 50 | Mitochondrial fidelity and metabolic agility control immune cell fate and function. Journal of Clinical Investigation, 2018, 128, 3651-3661. | 8.2 | 32 |
| 51 | Parkin regulation of CHOP modulates susceptibility to cardiac endoplasmic reticulum stress. Scientific Reports, 2017, 7, 2093. | 3.3 | 31 |
| 52 | The Role of Comorbidities in Cardioprotection. Journal of Cardiovascular Pharmacology and Therapeutics, 2011, 16, 267-272. | 2.0 | 30 |
| 53 | Mitochondrial plasticity in classical ischemic preconditioningâ€"moving beyond the mitochondrial KATP channel. Cardiovascular Research, 2003, 59, 1-6. | 3.8 | 29 |
| 54 | Fasting-induced FOXO4 blunts human CD4+ T helper cell responsiveness. Nature Metabolism, 2021, 3, 318-326. | 11.9 | 29 |

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|---|---|---|---|
| 55 | The role of caloric load and mitochondrial homeostasis in the regulation of the NLRP3 inflammasome. Cellular and Molecular Life Sciences, 2017, 74, 1777-1791. | 5.4 | 28 |
| 56 | Boosting NAD+ blunts TLR4-induced type I IFN in control and systemic lupus erythematosus monocytes. Journal of Clinical Investigation, 2022, 132, . | 8.2 | 27 |
| 57 | A Pilot Study To Investigate the Immune-Modulatory Effects of Fasting in Steroid-Naive Mild Asthmatics. Journal of Immunology, 2018, 201, 1382-1388. | 0.8 | 24 |
| 58 | BLOC1S1/GCN5L1/BORCS1 is a critical mediator for the initiation of autolysosomal tubulation. Autophagy, 2021, 17, 3707-3724. | 9.1 | 24 |
| 59 | ATP-degrading ENPP1 is required for survival (or persistence) of long-lived plasma cells. Scientific Reports, 2017, 7, 17867. | 3.3 | 23 |
| 60 | Loss of GCN5L1 in cardiac cells disrupts glucose metabolism and promotes cell death via reduced Akt/mTORC2 signaling. Biochemical Journal, 2019, 476, 1713-1724. | 3.7 | 22 |
| 61 | Cardiac-specific deletion of GCN5L1 restricts recovery from ischemia-reperfusion injury. Journal of Molecular and Cellular Cardiology, 2019, 129, 69-78. | 1.9 | 19 |
| 62 | Immunometabolism at the Nexus of Cancer Therapeutic Efficacy and Resistance. Frontiers in Immunology, 2021, 12, 657293. | 4.8 | 18 |
| 63 | Parkin in the regulation of fat uptake and mitochondrial biology. Current Opinion in Lipidology, 2012, 23, 201-205. | 2.7 | 17 |
| 64 | Identification and Validation of Nutrient State-Dependent Serum Protein Mediators of Human CD4+ T Cell Responsiveness. Nutrients, 2021, 13, 1492. | 4.1 | 16 |
| 65 | GCN5L1 interacts with Î±TAT1 and RanBP2 to regulate hepatic Î±-tubulin acetylation and lysosome trafficking. Journal of Cell Science, 2018, 131, . | 2.0 | 15 |
| 66 | Mitochondrial GCN5L1 regulates glutaminase acetylation and hepatocellular carcinoma. Clinical and Translational Medicine, 2022, 12, e852. | 4.0 | 14 |
| 67 | Mitochondrial General Control of Amino Acid Synthesis 5 Like 1 Regulates Glutaminolysis, Mammalian Target of Rapamycin Complex 1 Activity, and Murine Liver Regeneration. Hepatology, 2020, 71, 643-657. | 7.3 | 13 |
| 68 | Feeding-induced resistance to acute lethal sepsis is dependent on hepatic BMAL1 and FXR signalling. Nature Communications, 2021, 12, 2745. | 12.8 | 13 |
| 69 | Caloric excess or restriction mediated modulation of metabolic enzyme acetylationâ€"proposed effects on cardiac growth and function. Biochimica Et Biophysica Acta - Molecular Cell Research, 2011, 1813, 1279-1285. | 4.1 | 12 |
| 70 | The emerging roles of GCN5L1 in mitochondrial and vacuolar organelle biology. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2021, 1864, 194598. | 1.9 | 8 |
| 71 | Allele-specific mitochondrial stress induced by Multiple Mitochondrial Dysfunctions Syndrome 1 pathogenic mutations modeled in Caenorhabditis elegans. PLoS Genetics, 2021, 17, e1009771. | 3.5 | 7 |
| 72 | Rethinking Protein Acetylation in Pressure Overload-Induced Heart Failure. Circulation Research, 2020, 127, 1109-1111. | 4.5 | 5 |

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|---|---|---|---|
| 73 | Obesity and cardiac function â€“ the role of caloric excess and its reversal. Drug Discovery Today Disease Mechanisms, 2013, 10, e41-e46. | 0.8 | 4 |
| 74 | The enigma of anti-inflammatory therapy for the management of heart failure. Cardiovascular Research, 2019, 116, 6-8. | 3.8 | 3 |
| 75 | Proteomic and metabolomic advances uncover biomarkers of mitochondrial disease pathophysiology and severity. Journal of Clinical Investigation, 2021, 131, . | 8.2 | 3 |
| 76 | Sâ€•nitrosylation of cyclophilin D alters mitochondrial permeability transition pore. FASEB Journal, 2011, 25, 1033.1. | 0.5 | 2 |
| 77 | Mitochondrial Fe-S cluster biogenesis, frataxin and the modulation of susceptibility to drug-induced cardiomyopathy. Aging, 2010, 2, 754-755. | 3.1 | 1 |
| 78 | Acetylation in the Control of Mitochondrial Metabolism and Integrity. , 2014, , 115-127. | | 0 |
| 79 | Modulation of mitochondrial permeability transition pore by the F <sub>1</sub> Fo ATP synthase O subunit. FASEB Journal, 2011, 25, 1097.1. | 0.5 | 0 |
| 80 | Abstract P234: S-nitrosylation of Cyclophilin D Attenuates Mitochondrial Permeability Transition Pore Opening: A Critical Role for Cysteine 203 Residue. Circulation Research, 2011, 109, . | 4.5 | 0 |