## Dietbert Neumann

List of Publications by Year in descending order

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85 papers 6,711 citations

36 h-index 80 g-index

88 all docs 88 docs citations

88 times ranked 8488 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | LKB1 Is the Upstream Kinase in the AMP-Activated Protein Kinase Cascade. Current Biology, 2003, 13, 2004-2008.   | 3.9 | 1,456     |
| 2  | Activation of the AMP-activated Protein Kinase by the Anti-diabetic Drug Metformin in Vivo. Journal of Biological Chemistry, 2004, 279, 43940-43951.   | 3.4 | 423       |
| 3  | Dissecting the Role of 5′-AMP for Allosteric Stimulation, Activation, and Deactivation of AMP-activated Protein Kinase. Journal of Biological Chemistry, 2006, 281, 32207-32216.   | 3.4 | 393       |
| 4  | Insulin Antagonizes Ischemia-induced Thr172 Phosphorylation of AMP-activated Protein Kinase α-Subunits in Heart via Hierarchical Phosphorylation of Ser485/491. Journal of Biological Chemistry, 2006, 281, 5335-5340.   | 3.4 | 308       |
| 5  | Phosphorylation of LKB1 at Serine 428 by Protein Kinase C- $\hat{\mathbf{I}}$ Is Required for Metformin-Enhanced Activation of the AMP-Activated Protein Kinase in Endothelial Cells. Circulation, 2008, 117, 952-962.   | 1.6 | 247       |
| 6  | AMPK-Mediated AS160 Phosphorylation in Skeletal Muscle Is Dependent on AMPK Catalytic and Regulatory Subunits. Diabetes, 2006, 55, 2051-2058.  | 0.6 | 239       |
| 7  | PKA phosphorylates and inactivates AMPKÎ $\pm$ to promote efficient lipolysis. EMBO Journal, 2010, 29, 469-481.  | 7.8 | 235       |
| 8  | Identification of Phosphorylation Sites in AMP-activated Protein Kinase (AMPK) for Upstream AMPK Kinases and Study of Their Roles by Site-directed Mutagenesis. Journal of Biological Chemistry, 2003, 278, 28434-28442. | 3.4 | 204       |
| 9  | Dietary Phytoestrogens Activate AMP-Activated Protein Kinase With Improvement in Lipid and Glucose Metabolism. Diabetes, 2008, 57, 1176-1185.  | 0.6 | 177       |
| 10 | Activation of Protein Kinase Cζ by Peroxynitrite Regulates LKB1-dependent AMP-activated Protein Kinase in Cultured Endothelial Cells. Journal of Biological Chemistry, 2006, 281, 6366-6375.                             | 3.4 | 161       |
| 11 | Cross-talk between Two Essential Nutrient-sensitive Enzymes. Journal of Biological Chemistry, 2014, 289, 10592-10606.  | 3.4 | 154       |
| 12 | AMP-activated Kinase Inhibits the Epithelial Na+ Channel through Functional Regulation of the Ubiquitin Ligase Nedd4-2. Journal of Biological Chemistry, 2006, 281, 26159-26169.   | 3.4 | 139       |
| 13 | Epithelial Sodium Channel Inhibition by AMP-activated Protein Kinase in Oocytes and Polarized Renal Epithelial Cells. Journal of Biological Chemistry, 2005, 280, 17608-17616.   | 3.4 | 136       |
| 14 | Mammalian AMP-activated protein kinase: functional, heterotrimeric complexes by co-expression of subunits in Escherichia coli. Protein Expression and Purification, 2003, 30, 230-237.                                   | 1.3 | 126       |
| 15 | AMP-activated protein kinase undergoes nucleotide-dependent conformational changes. Nature Structural and Molecular Biology, 2012, 19, 716-718.  | 8.2 | 112       |
| 16 | AMP-activated Protein Kinase Phosphorylates and Desensitizes Smooth Muscle Myosin Light Chain Kinase. Journal of Biological Chemistry, 2008, 283, 18505-18512.   | 3.4 | 99        |
| 17 | Dual Mechanisms Regulating AMPK Kinase Action in the Ischemic Heart. Circulation Research, 2005, 96, 337-345.  | 4.5 | 95        |
| 18 | PKA Regulates Vacuolar H+-ATPase Localization and Activity via Direct Phosphorylation of the A Subunit in Kidney Cells. Journal of Biological Chemistry, 2010, 285, 24676-24685.   | 3.4 | 90        |

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|----|---|------|-----------|
| 19 | Identification of the Serine 307 of LKB1 as a Novel Phosphorylation Site Essential for Its<br>Nucleocytoplasmic Transport and Endothelial Cell Angiogenesis. Molecular and Cellular Biology,<br>2009, 29, 3582-3596.                                  | 2.3  | 84        |
| 20 | Vacuolar H <sup>+</sup> -ATPase apical accumulation in kidney intercalated cells is regulated by PKA and AMP-activated protein kinase. American Journal of Physiology - Renal Physiology, 2010, 298, F1162-F1169.                                     | 2.7  | 84        |
| 21 | Conserved regulatory elements in AMPK. Nature, 2013, 498, E8-E10.   | 27.8 | 84        |
| 22 | Structural Properties of AMP-activated Protein Kinase. Journal of Biological Chemistry, 2008, 283, 18331-18343.   | 3.4  | 82        |
| 23 | AMP-activated protein kinase inhibits alkaline pH- and PKA-induced apical vacuolar H+-ATPase accumulation in epididymal clear cells. American Journal of Physiology - Cell Physiology, 2009, 296, C672-C681.  | 4.6  | 73        |
| 24 | Autoactivation of Transforming Growth Factor $\hat{I}^2$ -activated Kinase 1 Is a Sequential Bimolecular Process. Journal of Biological Chemistry, 2010, 285, 25753-25766.  | 3.4  | 72        |
| 25 | The endocannabinoid system: Overview of an emerging multi-faceted therapeutic target.<br>Prostaglandins Leukotrienes and Essential Fatty Acids, 2019, 140, 51-56.   | 2.2  | 70        |
| 26 | A molecular approach to the concerted action of kinases involved in energy homoeostasis. Biochemical Society Transactions, 2003, 31, 169-174.   | 3.4  | 69        |
| 27 | The PP1-R6 protein phosphatase holoenzyme is involved in the glucose-induced dephosphorylation and inactivation of AMP-activated protein kinase, a key regulator of insulin secretion, in MIN6 $\hat{l}^2$ cells. FASEB Journal, 2010, 24, 5080-5091. | 0.5  | 66        |
| 28 | C-terminal Lysines Determine Phospholipid Interaction of Sarcomeric Mitochondrial Creatine Kinase. Journal of Biological Chemistry, 2004, 279, 24334-24342.   | 3.4  | 63        |
| 29 | Post-translational modifications of CD36 (SR-B2): Implications for regulation of myocellular fatty acid uptake. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 2253-2258.  | 3.8  | 61        |
| 30 | Is TAK1 a Direct Upstream Kinase of AMPK?. International Journal of Molecular Sciences, 2018, 19, 2412.   | 4.1  | 61        |
| 31 | Phosphocreatine Interacts with Phospholipids, Affects Membrane Properties and Exerts<br>Membrane-Protective Effects. PLoS ONE, 2012, 7, e43178.   | 2.5  | 61        |
| 32 | Regulation of the creatine transporter by AMP-activated protein kinase in kidney epithelial cells. American Journal of Physiology - Renal Physiology, 2010, 299, F167-F177.   | 2.7  | 57        |
| 33 | AMPK Î <sup>2</sup> subunits display isoform specific affinities for carbohydrates. FEBS Letters, 2010, 584, 3499-3503.   | 2.8  | 55        |
| 34 | AMP-activated protein kinase regulates the vacuolar H <sup>+</sup> -ATPase via direct phosphorylation of the A subunit (ATP6V1A) in the kidney. American Journal of Physiology - Renal Physiology, 2013, 305, F943-F956.                              | 2.7  | 50        |
| 35 | Palmitate-Induced Vacuolar-Type H+-ATPase Inhibition Feeds Forward Into Insulin Resistance and Contractile Dysfunction. Diabetes, 2017, 66, 1521-1534.  | 0.6  | 50        |
| 36 | The Recruitment of AMP-activated Protein Kinase to Glycogen Is Regulated by Autophosphorylation. Journal of Biological Chemistry, 2015, 290, 11715-11728.   | 3.4  | 37        |

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|----|--|------|-----------|
| 37 | Protein kinase-D1 overexpression prevents lipid-induced cardiac insulin resistance. Journal of Molecular and Cellular Cardiology, 2014, 76, 208-217.   | 1.9  | 32        |
| 38 | New Candidate Targets of AMP-Activated Protein Kinase in Murine Brain Revealed by a Novel Multidimensional Substrate-Screen for Protein Kinases. Journal of Proteome Research, 2007, 6, 3266-3277.                               | 3.7  | 31        |
| 39 | AMPK activation by long chain fatty acyl analogs. Biochemical Pharmacology, 2008, 76, 1263-1275.   | 4.4  | 31        |
| 40 | 2-Arachidonoylglycerol ameliorates inflammatory stress-induced insulin resistance in cardiomyocytes. Journal of Biological Chemistry, 2017, 292, 7105-7114.  | 3.4  | 30        |
| 41 | Myosin light chains are not a physiological substrate of AMPK in the control of cell structure changes. FEBS Letters, 2009, 583, 25-28.  | 2.8  | 27        |
| 42 | Cardiac contraction-induced GLUT4 translocation requires dual signaling input. Trends in Endocrinology and Metabolism, 2015, 26, 404-410.  | 7.1  | 27        |
| 43 | Co-expression of LKB1, MO25î± and STRADî± in bacteria yield the functional and active heterotrimeric complex. Molecular Biotechnology, 2007, 36, 220-231.  | 2.4  | 25        |
| 44 | Homo-oligomerization and Activation of AMP-activated Protein Kinase Are Mediated by the Kinase Domain αG-Helix. Journal of Biological Chemistry, 2009, 284, 27425-27437.   | 3.4  | 25        |
| 45 | Role of Binding and Nucleoside Diphosphate Kinase A in the Regulation of the Cystic Fibrosis<br>Transmembrane Conductance Regulator by AMP-activated Protein Kinase. Journal of Biological<br>Chemistry, 2012, 287, 33389-33400. | 3.4  | 25        |
| 46 | AMPK-dependent activation of the Cyclin Y/CDK16 complex controls autophagy. Nature Communications, 2020, 11, 1032.   | 12.8 | 25        |
| 47 | Understanding the distinct subcellular trafficking of CD36 and GLUT4 during the development of myocardial insulin resistance. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165775.                    | 3.8  | 24        |
| 48 | Molecular mechanism of lipid-induced cardiac insulin resistance and contractile dysfunction. Prostaglandins Leukotrienes and Essential Fatty Acids, 2018, 136, 131-141.  | 2.2  | 23        |
| 49 | Pharmacological Targeting of AMP-Activated Protein Kinase and Opportunities for Computer-Aided Drug Design. Journal of Medicinal Chemistry, 2016, 59, 2879-2893.   | 6.4  | 21        |
| 50 | MSP: An emerging player in metabolic syndrome. Cytokine and Growth Factor Reviews, 2015, 26, 75-82.  | 7.2  | 19        |
| 51 | Activation of the metabolic sensor AMP-activated protein kinase inhibits aquaporin-2 function in kidney principal cells. American Journal of Physiology - Renal Physiology, 2016, 311, F890-F900.                                | 2.7  | 19        |
| 52 | Augmenting Vacuolar H+-ATPase Function Prevents Cardiomyocytes from Lipid-Overload Induced Dysfunction. International Journal of Molecular Sciences, 2020, 21, 1520.   | 4.1  | 19        |
| 53 | AMP-Activated Protein Kinase β-Subunit Requires Internal Motion forÂOptimal Carbohydrate Binding.<br>Biophysical Journal, 2012, 102, 305-314.  | 0.5  | 18        |
| 54 | Tracking and quantification of 32P-labeled phosphopeptides in liquid chromatography matrix-assisted laser desorption/ionization mass spectrometry. Analytical Biochemistry, 2009, 390, 141-148.                                  | 2.4  | 17        |

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|----|--|-----|-----------|
| 55 | Calcium signaling recruits substrate transporters GLUT4 and CD36 to the sarcolemma without increasing cardiac substrate uptake. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E225-E236.                                       | 3.5 | 17        |
| 56 | MSP is a negative regulator of inflammation and lipogenesis in ex vivo models of non-alcoholic steatohepatitis. Experimental and Molecular Medicine, 2016, 48, e258-e258.  | 7.7 | 17        |
| 57 | $\hat{l}^21$ Pix exchange factor stabilizes the ubiquitin ligase Nedd4-2 and plays a critical role in ENaC regulation by AMPK in kidney epithelial cells. Journal of Biological Chemistry, 2018, 293, 11612-11624.   | 3.4 | 17        |
| 58 | The PP1â€R6 protein phosphatase holoenzyme is involved in the glucoseâ€induced dephosphorylation and inactivation of AMPâ€activated protein kinase, a key regulator of insulin secretion, in MIN6 l² cells. FASEB Journal, 2010, 24, 5080-5091.            | 0.5 | 17        |
| 59 | Regulation of brain-type creatine kinase by AMP-activated protein kinase: Interaction, phosphorylation and ER localization. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1271-1283.  | 1.0 | 16        |
| 60 | Specific amino acid supplementation rescues the heart from lipid overload-induced insulin resistance and contractile dysfunction by targeting the endosomal mTOR–ν-ATPase axis. Molecular Metabolism, 2021, 53, 101293.                                    | 6.5 | 16        |
| 61 | Human embryonic stem cell-derived cardiomyocytes as an in vitro model to study cardiac insulin resistance. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 1960-1967.  | 3.8 | 14        |
| 62 | Hypoxia impairs adaptation of skeletal muscle protein turnover- and AMPK signaling during fasting-induced muscle atrophy. PLoS ONE, 2018, 13, e0203630.  | 2.5 | 14        |
| 63 | Macrophage Stimulating Protein Enhances Hepatic Inflammation in a NASH Model. PLoS ONE, 2016, 11, e0163843.  | 2.5 | 13        |
| 64 | AICAR Protects against High Palmitate/High Insulin-Induced Intramyocellular Lipid Accumulation and Insulin Resistance in HL-1 Cardiac Cells by Inducing PPAR-Target Gene Expression. PPAR Research, 2015, 2015, 1-12.                                      | 2.4 | 12        |
| 65 | Novel candidate substrates of AMP-activated protein kinase identified in red blood cell lysates.<br>Biochemical and Biophysical Research Communications, 2010, 398, 296-301.   | 2.1 | 10        |
| 66 | Glucoseâ€dependent regulation of AMPâ€activated protein kinase in MIN6 beta cells is not affected by the protein kinase A pathway. FEBS Letters, 2012, 586, 4241-4247.   | 2.8 | 10        |
| 67 | Small heterodimer partner (SHP) contributes to insulin resistance in cardiomyocytes. Biochimica Et<br>Biophysica Acta - Molecular and Cell Biology of Lipids, 2017, 1862, 541-551.   | 2.4 | 10        |
| 68 | AMP-activated Protein Kinase Up-regulates Mitogen-activated Protein (MAP) Kinase-interacting Serine/Threonine Kinase 1a-dependent Phosphorylation of Eukaryotic Translation Initiation Factor 4E. Journal of Biological Chemistry, 2016, 291, 17020-17027. | 3.4 | 9         |
| 69 | Putative Role of Protein Palmitoylation in Cardiac Lipid-Induced Insulin Resistance. International Journal of Molecular Sciences, 2020, 21, 9438.  | 4.1 | 9         |
| 70 | The interaction between AMPK $\hat{l}^2$ 2 and the PP1-targeting subunit R6 is dynamically regulated by intracellular glycogen content. Biochemical Journal, 2016, 473, 937-947.   | 3.7 | 8         |
| 71 | GSK-3 Inhibitors: Anti-Diabetic Treatment Associated with Cardiac Risk?. Cardiovascular Drugs and Therapy, 2016, 30, 233-235.  | 2.6 | 8         |
| 72 | AMP-Activated Protein Kinase Signalling. International Journal of Molecular Sciences, 2019, 20, 766.   | 4.1 | 7         |

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|----|---|-----|-----------|
| 73 | Signaling by AMP-activated Protein Kinase. , 0, , 303-338.  |     | 6         |
| 74 | Fluorescent labelling of membrane fatty acid transporter CD36 (SR-B2) in the extracellular loop. PLoS ONE, 2019, 14, e0210704.  | 2.5 | 5         |
| 75 | An automated home-built low-cost fermenter suitable for large-scale bacterial expression of proteins in <i>Escherichia coli</i> . BioTechniques, 2008, 45, 187-189.   | 1.8 | 4         |
| 76 | The CCNY (cyclin Y)-CDK16 kinase complex: a new regulator of autophagy downstream of AMPK. Autophagy, 2020, 16, 1724-1726.  | 9.1 | 4         |
| 77 | Endosomal v-ATPase as a Sensor Determining Myocardial Substrate Preference. Metabolites, 2022, 12, 579.   | 2.9 | 3         |
| 78 | MK3 Modulation Affects BMI1-Dependent and Independent Cell Cycle Check-Points. PLoS ONE, 2015, 10, e0118840.  | 2.5 | 2         |
| 79 | Letter by Neumann et al Regarding Article, "Myostatin Regulates Energy Homeostasis in the Heart and Prevents Heart Failure― Circulation Research, 2015, 116, e95-6.   | 4.5 | 1         |
| 80 | Assessment of AMPK-Stimulated Cellular Long-Chain Fatty Acid and Glucose Uptake. Methods in Molecular Biology, 2018, 1732, 343-361.   | 0.9 | 1         |
| 81 | PS9 - 41. Translocation of substrate transporters glut4 and cd36 to the sarcolemma and subsequent activation to increase substrate uptake are separate events. Nederlands Tijdschrift Voor Diabetologie, 2012, 10, 127-127. | 0.0 | 0         |
| 82 | PS9 - 42. Contraction-induced increase in muscle glucose uptake requires dual signaling input –<br>Consequence for muscle glucose utilization in diabetes. Nederlands Tijdschrift Voor Diabetologie,<br>2012, 10, 127-128.  | 0.0 | 0         |
| 83 | PS6 - 2. †Tour d†MAMPK†: Myocellular cycling of the energy sensor AMPK between free and glycogen-bound states. Nederlands Tijdschrift Voor Diabetologie, 2013, 11, 150-150.   | 0.0 | 0         |
| 84 | In Vitro Methods to Study AMPK. Exs, 2016, 107, 471-489.  | 1.4 | 0         |
| 85 | Role of AMPK and PKA in the trafficking of Vâ€ATPase in kidney intercalated cells. FASEB Journal, 2010, 24,   | 0.5 | o         |