

# Dietbert Neumann

## List of Publications by Year in descending order

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85  
papers

6,711  
citations

116194

36  
h-index

71088

80  
g-index

88  
all docs

88  
docs citations

88  
times ranked

9306  
citing authors

#	ARTICLE	IF	CITATIONS
1	LKB1 Is the Upstream Kinase in the AMP-Activated Protein Kinase Cascade. <i>Current Biology</i> , 2003, 13, 2004-2008.	1.8	1,456
2	Activation of the AMP-activated Protein Kinase by the Anti-diabetic Drug Metformin in Vivo. <i>Journal of Biological Chemistry</i> , 2004, 279, 43940-43951.	1.6	423
3	Dissecting the Role of 5â€²-AMP for Allosteric Stimulation, Activation, and Deactivation of AMP-activated Protein Kinase. <i>Journal of Biological Chemistry</i> , 2006, 281, 32207-32216.	1.6	393
4	Insulin Antagonizes Ischemia-induced Thr172 Phosphorylation of AMP-activated Protein Kinase $\alpha$ -Subunits in Heart via Hierarchical Phosphorylation of Ser485/491. <i>Journal of Biological Chemistry</i> , 2006, 281, 5335-5340.	1.6	308
5	Phosphorylation of LKB1 at Serine 428 by Protein Kinase C $\delta$ Is Required for Metformin-Enhanced Activation of the AMP-Activated Protein Kinase in Endothelial Cells. <i>Circulation</i> , 2008, 117, 952-962.	1.6	247
6	AMPK-Mediated AS160 Phosphorylation in Skeletal Muscle Is Dependent on AMPK Catalytic and Regulatory Subunits. <i>Diabetes</i> , 2006, 55, 2051-2058.	0.3	239
7	PKA phosphorylates and inactivates AMPK $\alpha$ to promote efficient lipolysis. <i>EMBO Journal</i> , 2010, 29, 469-481.	3.5	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. <i>Journal of Biological Chemistry</i> , 2003, 278, 28434-28442.	1.6	204
9	Dietary Phytoestrogens Activate AMP-Activated Protein Kinase With Improvement in Lipid and Glucose Metabolism. <i>Diabetes</i> , 2008, 57, 1176-1185.	0.3	177
10	Activation of Protein Kinase C $\delta$ by Peroxynitrite Regulates LKB1-dependent AMP-activated Protein Kinase in Cultured Endothelial Cells. <i>Journal of Biological Chemistry</i> , 2006, 281, 6366-6375.	1.6	161
11	Cross-talk between Two Essential Nutrient-sensitive Enzymes. <i>Journal of Biological Chemistry</i> , 2014, 289, 10592-10606.	1.6	154
12	AMP-activated Kinase Inhibits the Epithelial Na <sup>+</sup> Channel through Functional Regulation of the Ubiquitin Ligase Nedd4-2. <i>Journal of Biological Chemistry</i> , 2006, 281, 26159-26169.	1.6	139
13	Epithelial Sodium Channel Inhibition by AMP-activated Protein Kinase in Oocytes and Polarized Renal Epithelial Cells. <i>Journal of Biological Chemistry</i> , 2005, 280, 17608-17616.	1.6	136
14	Mammalian AMP-activated protein kinase: functional, heterotrimeric complexes by co-expression of subunits in <i>Escherichia coli</i> . <i>Protein Expression and Purification</i> , 2003, 30, 230-237.	0.6	126
15	AMP-activated protein kinase undergoes nucleotide-dependent conformational changes. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 716-718.	3.6	112
16	AMP-activated Protein Kinase Phosphorylates and Desensitizes Smooth Muscle Myosin Light Chain Kinase. <i>Journal of Biological Chemistry</i> , 2008, 283, 18505-18512.	1.6	99
17	Dual Mechanisms Regulating AMPK Kinase Action in the Ischemic Heart. <i>Circulation Research</i> , 2005, 96, 337-345.	2.0	95
18	PKA Regulates Vacuolar H <sup>+</sup> -ATPase Localization and Activity via Direct Phosphorylation of the A Subunit in Kidney Cells. <i>Journal of Biological Chemistry</i> , 2010, 285, 24676-24685.	1.6	90

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19	Identification of the Serine 307 of LKB1 as a Novel Phosphorylation Site Essential for Its Nucleocytoplasmic Transport and Endothelial Cell Angiogenesis. <i>Molecular and Cellular Biology</i> , 2009, 29, 3582-3596.	1.1	84
20	Vacuolar H <sup>+</sup> -ATPase apical accumulation in kidney intercalated cells is regulated by PKA and AMP-activated protein kinase. <i>American Journal of Physiology - Renal Physiology</i> , 2010, 298, F1162-F1169.	1.3	84
21	Conserved regulatory elements in AMPK. <i>Nature</i> , 2013, 498, E8-E10.	13.7	84
22	Structural Properties of AMP-activated Protein Kinase. <i>Journal of Biological Chemistry</i> , 2008, 283, 18331-18343.	1.6	82
23	AMP-activated protein kinase inhibits alkaline pH- and PKA-induced apical vacuolar H <sup>+</sup> -ATPase accumulation in epididymal clear cells. <i>American Journal of Physiology - Cell Physiology</i> , 2009, 296, C672-C681.	2.1	73
24	Autoactivation of Transforming Growth Factor $\beta$ -activated Kinase 1 Is a Sequential Bimolecular Process. <i>Journal of Biological Chemistry</i> , 2010, 285, 25753-25766.	1.6	72
25	The endocannabinoid system: Overview of an emerging multi-faceted therapeutic target. <i>Prostaglandins Leukotrienes and Essential Fatty Acids</i> , 2019, 140, 51-56.	1.0	70
26	A molecular approach to the concerted action of kinases involved in energy homeostasis. <i>Biochemical Society Transactions</i> , 2003, 31, 169-174.	1.6	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 $\beta$ cells. <i>FASEB Journal</i> , 2010, 24, 5080-5091.	0.2	66
28	C-terminal Lysines Determine Phospholipid Interaction of Sarcomeric Mitochondrial Creatine Kinase. <i>Journal of Biological Chemistry</i> , 2004, 279, 24334-24342.	1.6	63
29	Post-translational modifications of CD36 (SR-B2): Implications for regulation of myocellular fatty acid uptake. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2016, 1862, 2253-2258.	1.8	61
30	Is TAK1 a Direct Upstream Kinase of AMPK?. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2412.	1.8	61
31	Phosphocreatine Interacts with Phospholipids, Affects Membrane Properties and Exerts Membrane-Protective Effects. <i>PLoS ONE</i> , 2012, 7, e43178.	1.1	61
32	Regulation of the creatine transporter by AMP-activated protein kinase in kidney epithelial cells. <i>American Journal of Physiology - Renal Physiology</i> , 2010, 299, F167-F177.	1.3	57
33	AMPK $\beta$ subunits display isoform specific affinities for carbohydrates. <i>FEBS Letters</i> , 2010, 584, 3499-3503.	1.3	55
34	AMP-activated protein kinase regulates the vacuolar H <sup>+</sup> -ATPase via direct phosphorylation of the A subunit (ATP6V1A) in the kidney. <i>American Journal of Physiology - Renal Physiology</i> , 2013, 305, F943-F956.	1.3	50
35	Palmitate-Induced Vacuolar-Type H <sup>+</sup> -ATPase Inhibition Feeds Forward Into Insulin Resistance and Contractile Dysfunction. <i>Diabetes</i> , 2017, 66, 1521-1534.	0.3	50
36	The Recruitment of AMP-activated Protein Kinase to Glycogen Is Regulated by Autophosphorylation. <i>Journal of Biological Chemistry</i> , 2015, 290, 11715-11728.	1.6	37

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37	Protein kinase-D1 overexpression prevents lipid-induced cardiac insulin resistance. <i>Journal of Molecular and Cellular Cardiology</i> , 2014, 76, 208-217.	0.9	32
38	New Candidate Targets of AMP-Activated Protein Kinase in Murine Brain Revealed by a Novel Multidimensional Substrate-Screen for Protein Kinases. <i>Journal of Proteome Research</i> , 2007, 6, 3266-3277.	1.8	31
39	AMPK activation by long chain fatty acyl analogs. <i>Biochemical Pharmacology</i> , 2008, 76, 1263-1275.	2.0	31
40	2-Arachidonoylglycerol ameliorates inflammatory stress-induced insulin resistance in cardiomyocytes. <i>Journal of Biological Chemistry</i> , 2017, 292, 7105-7114.	1.6	30
41	Myosin light chains are not a physiological substrate of AMPK in the control of cell structure changes. <i>FEBS Letters</i> , 2009, 583, 25-28.	1.3	27
42	Cardiac contraction-induced GLUT4 translocation requires dual signaling input. <i>Trends in Endocrinology and Metabolism</i> , 2015, 26, 404-410.	3.1	27
43	Co-expression of LKB1, MO25 $\beta$ and STRAD $\beta$ in bacteria yield the functional and active heterotrimeric complex. <i>Molecular Biotechnology</i> , 2007, 36, 220-231.	1.3	25
44	Homo-oligomerization and Activation of AMP-activated Protein Kinase Are Mediated by the Kinase Domain I $\beta$ G-Helix. <i>Journal of Biological Chemistry</i> , 2009, 284, 27425-27437.	1.6	25
45	Role of Binding and Nucleoside Diphosphate Kinase A in the Regulation of the Cystic Fibrosis Transmembrane Conductance Regulator by AMP-activated Protein Kinase. <i>Journal of Biological Chemistry</i> , 2012, 287, 33389-33400.	1.6	25
46	AMPK-dependent activation of the Cyclin Y/CDK16 complex controls autophagy. <i>Nature Communications</i> , 2020, 11, 1032.	5.8	25
47	Understanding the distinct subcellular trafficking of CD36 and GLUT4 during the development of myocardial insulin resistance. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2020, 1866, 165775.	1.8	24
48	Molecular mechanism of lipid-induced cardiac insulin resistance and contractile dysfunction. <i>Prostaglandins Leukotrienes and Essential Fatty Acids</i> , 2018, 136, 131-141.	1.0	23
49	Pharmacological Targeting of AMP-Activated Protein Kinase and Opportunities for Computer-Aided Drug Design. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 2879-2893.	2.9	21
50	MSP: An emerging player in metabolic syndrome. <i>Cytokine and Growth Factor Reviews</i> , 2015, 26, 75-82.	3.2	19
51	Activation of the metabolic sensor AMP-activated protein kinase inhibits aquaporin-2 function in kidney principal cells. <i>American Journal of Physiology - Renal Physiology</i> , 2016, 311, F890-F900.	1.3	19
52	Augmenting Vacuolar H <sup>+</sup> -ATPase Function Prevents Cardiomyocytes from Lipid-Overload Induced Dysfunction. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1520.	1.8	19
53	AMP-Activated Protein Kinase $\beta$ -Subunit Requires Internal Motion for Optimal Carbohydrate Binding. <i>Biophysical Journal</i> , 2012, 102, 305-314.	0.2	18
54	Tracking and quantification of <sup>32</sup> P-labeled phosphopeptides in liquid chromatography matrix-assisted laser desorption/ionization mass spectrometry. <i>Analytical Biochemistry</i> , 2009, 390, 141-148.	1.1	17

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55	Calcium signaling recruits substrate transporters GLUT4 and CD36 to the sarcolemma without increasing cardiac substrate uptake. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2014, 307, E225-E236.	1.8	17
56	MSP is a negative regulator of inflammation and lipogenesis in ex vivo models of non-alcoholic steatohepatitis. <i>Experimental and Molecular Medicine</i> , 2016, 48, e258-e258.	3.2	17
57	$\beta$ 1Pix exchange factor stabilizes the ubiquitin ligase Nedd4-2 and plays a critical role in ENaC regulation by AMPK in kidney epithelial cells. <i>Journal of Biological Chemistry</i> , 2018, 293, 11612-11624.	1.6	17
58	The PP1 $\alpha$ 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 $\beta$ cells. <i>FASEB Journal</i> , 2010, 24, 5080-5091.	0.2	17
59	Regulation of brain-type creatine kinase by AMP-activated protein kinase: Interaction, phosphorylation and ER localization. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 1271-1283.	0.5	16
60	Specific amino acid supplementation rescues the heart from lipid overload-induced insulin resistance and contractile dysfunction by targeting the endosomal mTOR $\alpha$ v-ATPase axis. <i>Molecular Metabolism</i> , 2021, 53, 101293.	3.0	16
61	Human embryonic stem cell-derived cardiomyocytes as an in vitro model to study cardiac insulin resistance. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2018, 1864, 1960-1967.	1.8	14
62	Hypoxia impairs adaptation of skeletal muscle protein turnover- and AMPK signaling during fasting-induced muscle atrophy. <i>PLoS ONE</i> , 2018, 13, e0203630.	1.1	14
63	Macrophage Stimulating Protein Enhances Hepatic Inflammation in a NASH Model. <i>PLoS ONE</i> , 2016, 11, e0163843.	1.1	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. <i>PPAR Research</i> , 2015, 2015, 1-12.	1.1	12
65	Novel candidate substrates of AMP-activated protein kinase identified in red blood cell lysates. <i>Biochemical and Biophysical Research Communications</i> , 2010, 398, 296-301.	1.0	10
66	Glucose-dependent regulation of AMP-activated protein kinase in MIN6 beta cells is not affected by the protein kinase A pathway. <i>FEBS Letters</i> , 2012, 586, 4241-4247.	1.3	10
67	Small heterodimer partner (SHP) contributes to insulin resistance in cardiomyocytes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 541-551.	1.2	10
68	AMP-activated Protein Kinase Up-regulates Mitogen-activated Protein (MAP) Kinase-interacting Serine/Threonine Kinase 1 $\alpha$ -dependent Phosphorylation of Eukaryotic Translation Initiation Factor 4E. <i>Journal of Biological Chemistry</i> , 2016, 291, 17020-17027.	1.6	9
69	Putative Role of Protein Palmitoylation in Cardiac Lipid-Induced Insulin Resistance. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9438.	1.8	9
70	The interaction between AMPK $\beta$ 2 and the PP1-targeting subunit R6 is dynamically regulated by intracellular glycogen content. <i>Biochemical Journal</i> , 2016, 473, 937-947.	1.7	8
71	GSK-3 Inhibitors: Anti-Diabetic Treatment Associated with Cardiac Risk?. <i>Cardiovascular Drugs and Therapy</i> , 2016, 30, 233-235.	1.3	8
72	AMP-Activated Protein Kinase Signalling. <i>International Journal of Molecular Sciences</i> , 2019, 20, 766.	1.8	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.	1.1	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.	0.8	4
76	The CCNY (cyclin Y)-CDK16 kinase complex: a new regulator of autophagy downstream of AMPK. Autophagy, 2020, 16, 1724-1726.	4.3	4
77	Endosomal v-ATPase as a Sensor Determining Myocardial Substrate Preference. Metabolites, 2022, 12, 579.	1.3	3
78	MK3 Modulation Affects BMI1-Dependent and Independent Cell Cycle Check-Points. PLoS ONE, 2015, 10, e0118840.	1.1	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.	2.0	1
80	Assessment of AMPK-Stimulated Cellular Long-Chain Fatty Acid and Glucose Uptake. Methods in Molecular Biology, 2018, 1732, 343-361.	0.4	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 " Consequence for muscle glucose utilization in diabetes. Nederlands Tijdschrift Voor Diabetologie, 2012, 10, 127-128.	0.0	0
83	PS6 - 2. "Tour d'AMPK": 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 v-ATPase in kidney intercalated cells. FASEB Journal, 2010, 24, .	0.2	0