Barbara B Kahn

List of Publications by Year in descending order

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78 1 papers cit

19,843 citations

47006 47 h-index 76 g-index

80 all docs 80 docs citations

80 times ranked 19739 citing authors

#	Article	IF	Citations
1	AMP-activated protein kinase: Ancient energy gauge provides clues to modern understanding of metabolism. Cell Metabolism, 2005, 1, 15-25.	16.2	2,541
2	Leptin stimulates fatty-acid oxidation by activating AMP-activated protein kinase. Nature, 2002, 415, 339-343.	27.8	1,823
3	Serum retinol binding protein 4 contributes to insulin resistance in obesity and type 2 diabetes. Nature, 2005, 436, 356-362.	27.8	1,809
4	AMP-kinase regulates food intake by responding to hormonal and nutrient signals in the hypothalamus. Nature, 2004, 428, 569-574.	27.8	1,464
5	Retinol-Binding Protein 4 and Insulin Resistance in Lean, Obese, and Diabetic Subjects. New England Journal of Medicine, 2006, 354, 2552-2563.	27.0	1,182
6	Glucose Transporters and Insulin Action â€" Implications for Insulin Resistance and Diabetes Mellitus. New England Journal of Medicine, 1999, 341, 248-257.	27.0	1,123
7	Adipose-selective targeting of the GLUT4 gene impairs insulin action in muscle and liver. Nature, 2001, 409, 729-733.	27.8	1,058
8	Exercise, Glucose Transport, and Insulin Sensitivity. Annual Review of Medicine, 1998, 49, 235-261.	12.2	874
9	Discovery of a Class of Endogenous Mammalian Lipids with Anti-Diabetic and Anti-inflammatory Effects. Cell, 2014, 159, 318-332.	28.9	639
10	Targeted disruption of the glucose transporter 4 selectively in muscle causes insulin resistance and glucose intolerance. Nature Medicine, 2000, 6, 924-928.	30.7	624
11	A novel ChREBP isoform in adipose tissue regulates systemic glucose metabolism. Nature, 2012, 484, 333-338.	27.8	473
12	Metabolites as regulators of insulin sensitivity and metabolism. Nature Reviews Molecular Cell Biology, 2018, 19, 654-672.	37.0	369
13	Serum Retinol-Binding Protein Is More Highly Expressed in Visceral than in Subcutaneous Adipose Tissue and Is a Marker of Intra-abdominal Fat Mass. Cell Metabolism, 2007, 6, 79-87.	16.2	360
14	A high-fat, ketogenic diet induces a unique metabolic state in mice. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1724-E1739.	3.5	343
15	Adipose Tissue Branched Chain Amino Acid (BCAA) Metabolism Modulates Circulating BCAA Levels. Journal of Biological Chemistry, 2010, 285, 11348-11356.	3.4	321
16	AMPK integrates nutrient and hormonal signals to regulate food intake and energy balance through effects in the hypothalamus and peripheral tissues. Journal of Physiology, 2006, 574, 73-83.	2.9	284
17	Glucose transport and sensing in the maintenance of glucose homeostasis and metabolic harmony. Journal of Clinical Investigation, 2006, 116, 1767-1775.	8.2	274
18	Diet-induced Obesity Alters AMP Kinase Activity in Hypothalamus and Skeletal Muscle. Journal of Biological Chemistry, 2006, 281, 18933-18941.	3.4	246

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19	p70S6 Kinase Phosphorylates AMPK on Serine 491 to Mediate Leptin's Effect on Food Intake. Cell Metabolism, 2012, 16, 104-112.	16.2	236
20	In Vivo Administration of Leptin Activates Signal Transduction Directly in Insulin-Sensitive Tissues: Overlapping but Distinct Pathways from Insulin*. Endocrinology, 2000, 141, 2328-2339.	2.8	215
21	RBP4 Activates Antigen-Presenting Cells, Leading to Adipose Tissue Inflammation and Systemic Insulin Resistance. Cell Metabolism, 2014, 19, 512-526.	16.2	215
22	Reduction of Elevated Serum Retinol Binding Protein in Obese Children by Lifestyle Intervention: Association with Subclinical Inflammation. Journal of Clinical Endocrinology and Metabolism, 2007, 92, 1971-1974.	3.6	209
23	Retinol-Binding Protein 4 Inhibits Insulin Signaling in Adipocytes by Inducing Proinflammatory Cytokines in Macrophages through a c-Jun N-Terminal Kinase- and Toll-Like Receptor 4-Dependent and Retinol-Independent Mechanism. Molecular and Cellular Biology, 2012, 32, 2010-2019.	2.3	207
24	Adipose-specific overexpression of GLUT4 reverses insulin resistance and diabetes in mice lacking GLUT4 selectively in muscle. American Journal of Physiology - Endocrinology and Metabolism, 2005, 289, E551-E561.	3.5	196
25	Brown Adipose Tissue Controls Skeletal Muscle Function via the Secretion of Myostatin. Cell Metabolism, 2018, 28, 631-643.e3.	16.2	147
26	Palmitic Acid Hydroxystearic Acids Activate GPR40, Which Is Involved in Their Beneficial Effects on Glucose Homeostasis. Cell Metabolism, 2018, 27, 419-427.e4.	16.2	127
27	GLUT4 Expression in Adipocytes Regulates De Novo Lipogenesis and Levels of a Novel Class of Lipids With Antidiabetic and Anti-inflammatory Effects. Diabetes, 2016, 65, 1808-1815.	0.6	107
28	Absence of Carbohydrate Response Element Binding Protein in Adipocytes Causes Systemic Insulin Resistance and Impairs Glucose Transport. Cell Reports, 2017, 21, 1021-1035.	6.4	103
29	Branched Fatty Acid Esters of Hydroxy Fatty Acids (FAHFAs) Protect against Colitis by Regulating Gut Innate and Adaptive Immune Responses. Journal of Biological Chemistry, 2016, 291, 22207-22217.	3.4	102
30	Plasma Retinol-Binding Protein 4 (RBP4) Levels and Risk of Coronary Heart Disease. Circulation, 2013, 127, 1938-1947.	1.6	97
31	Long-term Fenretinide treatment prevents high-fat diet-induced obesity, insulin resistance, and hepatic steatosis. American Journal of Physiology - Endocrinology and Metabolism, 2009, 297, E1420-E1429.	3.5	96
32	In Vivo Administration of Leptin Activates Signal Transduction Directly in Insulin-Sensitive Tissues: Overlapping but Distinct Pathways from Insulin. Endocrinology, 2000, 141, 2328-2339.	2.8	81
33	Role of Hypothalamic Adenosine 5′-Monophosphate-Activated Protein Kinase in the Impaired Counterregulatory Response Induced by Repetitive Neuroglucopenia. Endocrinology, 2007, 148, 1367-1375.	2.8	80
34	Adipocyteâ€specific overexpression of retinolâ€binding protein 4 causes hepatic steatosis in mice. Hepatology, 2016, 64, 1534-1546.	7.3	80
35	Decreased clearance of serum retinol-binding protein and elevated levels of transthyretin in insulin-resistant <i>ob/ob</i> mice. American Journal of Physiology - Endocrinology and Metabolism, 2008, 294, E785-E793.	3.5	79
36	Brain GLUT4 Knockout Mice Have Impaired Glucose Tolerance, Decreased Insulin Sensitivity, and Impaired Hypoglycemic Counterregulation. Diabetes, 2017, 66, 587-597.	0.6	76

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37	Neuronal Protein Tyrosine Phosphatase 1B Deficiency Results in Inhibition of Hypothalamic AMPK and Isoform-Specific Activation of AMPK in Peripheral Tissues. Molecular and Cellular Biology, 2009, 29, 4563-4573.	2.3	72
38	Nutrient sensor links obesity with diabetes risk. Nature Medicine, 2004, 10, 1049-1050.	30.7	63
39	AIG1 and ADTRP are atypical integral membrane hydrolases that degrade bioactive FAHFAs. Nature Chemical Biology, 2016, 12, 367-372.	8.0	62
40	PAHSAs enhance hepatic and systemic insulin sensitivity through direct and indirect mechanisms. Journal of Clinical Investigation, 2019, 129, 4138-4150.	8.2	62
41	A Postsynaptic AMPKâ†'p21-Activated Kinase Pathway Drives Fasting-Induced Synaptic Plasticity in AgRP Neurons. Neuron, 2016, 91, 25-33.	8.1	60
42	A LC-MS–based workflow for measurement of branched fatty acid esters of hydroxy fatty acids. Nature Protocols, 2016, 11, 747-763.	12.0	58
43	Discovery of FAHFA-Containing Triacylglycerols and Their Metabolic Regulation. Journal of the American Chemical Society, 2019, 141, 8798-8806.	13.7	57
44	ATGL is a biosynthetic enzyme for fatty acid esters of hydroxy fatty acids. Nature, 2022, 606, 968-975.	27.8	57
45	PAHSAs attenuate immune responses and promote \hat{l}^2 cell survival in autoimmune diabetic mice. Journal of Clinical Investigation, 2019, 129, 3717-3731.	8.2	55
46	Rosiglitazone, PPARÎ ³ , and Type 2 Diabetes. New England Journal of Medicine, 2010, 363, 2667-2669.	27.0	54
47	Branched Fatty Acid Esters of Hydroxy Fatty Acids Are Preferred Substrates of the MODY8 Protein Carboxyl Ester Lipase. Biochemistry, 2016, 55, 4636-4641.	2.5	54
48	Stereochemistry of Endogenous Palmitic Acid Ester of 9-Hydroxystearic Acid and Relevance of Absolute Configuration to Regulation. Journal of the American Chemical Society, 2017, 139, 4943-4947.	13.7	53
49	Obesity-Linked PPARÎ ³ S273 Phosphorylation Promotes Insulin Resistance through Growth Differentiation Factor 3. Cell Metabolism, 2020, 32, 665-675.e6.	16.2	53
50	Insulin action in adipocytes, adipose remodeling, and systemic effects. Cell Metabolism, 2021, 33, 748-757.	16.2	51
51	Activation of AMPK-Regulated CRH Neurons in the PVH is Sufficient and Necessary to Induce Dietary Preference for Carbohydrate over Fat. Cell Reports, 2018, 22, 706-721.	6.4	50
52	Antigen Presentation and T-Cell Activation Are Critical for RBP4-Induced Insulin Resistance. Diabetes, 2016, 65, 1317-1327.	0.6	49
53	Retinol binding protein 4 primes the NLRP3 inflammasome by signaling through Toll-like receptors 2 and 4. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31309-31318.	7.1	49
54	Transthyretin Antisense Oligonucleotides Lower Circulating RBP4 Levels and Improve Insulin Sensitivity in Obese Mice. Diabetes, 2015, 64, 1603-1614.	0.6	47

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55	Disruption of Adipose Rab10-Dependent Insulin Signaling Causes Hepatic Insulin Resistance. Diabetes, 2016, 65, 1577-1589.	0.6	46
56	PKD1 Inhibits AMPKα2 through Phosphorylation of Serine 491 and Impairs Insulin Signaling in Skeletal Muscle Cells. Journal of Biological Chemistry, 2016, 291, 5664-5675.	3.4	45
57	Methodological Issues in Studying PAHSA Biology: Masking PAHSA Effects. Cell Metabolism, 2018, 28, 543-546.	16.2	40
58	Faster Protocol for Endogenous Fatty Acid Esters of Hydroxy Fatty Acid (FAHFA) Measurements. Analytical Chemistry, 2018, 90, 5358-5365.	6.5	39
59	RBP4 increases lipolysis in human adipocytes and is associated with increased lipolysis and hepatic insulin resistance in obese women. FASEB Journal, 2020, 34, 6099-6110.	0.5	39
60	Alterations in glucose transporter expression and function in diabetes: Mechanisms for insulin resistance. Journal of Cellular Biochemistry, 1992, 48, 122-128.	2.6	35
61	Novel role for retinol-binding protein 4 in the regulation of blood pressure. FASEB Journal, 2015, 29, 3133-3140.	0.5	33
62	The Relationship of Retinol Binding Protein 4 to Changes in Insulin Resistance and Cardiometabolic Risk in Overweight Black Adolescents. Journal of Pediatrics, 2009, 154, 67-73.e1.	1.8	31
63	Distinct biological activities of isomers from several families of branched fatty acid esters of hydroxy fatty acids (FAHFAs). Journal of Lipid Research, 2021, 62, 100108.	4.2	31
64	mTOR tells the brain that the body is hungry. Nature Medicine, 2006, 12, 615-617.	30.7	30
65	mTOR tells the brain that the body is hungry. Nature Medicine, 2006, 12, 615-617. Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. Diabetes, 2019, 68, 3-14.	30.7	30
	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal		
65	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. Diabetes, 2019, 68, 3-14. Downregulation of STRA6 in Adipocytes and Adipose Stromovascular Fraction in Obesity and Effects	0.6	30
65	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. Diabetes, 2019, 68, 3-14. Downregulation of STRA6 in Adipocytes and Adipose Stromovascular Fraction in Obesity and Effects of Adipocyte-Specific STRA6 Knockdown In Vivo. Molecular and Cellular Biology, 2014, 34, 1170-1186. BCAA Supplementation in Mice with Diet-induced Obesity Alters the Metabolome Without Impairing	0.6 2.3	30
65 66 67	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. Diabetes, 2019, 68, 3-14. Downregulation of STRA6 in Adipocytes and Adipose Stromovascular Fraction in Obesity and Effects of Adipocyte-Specific STRA6 Knockdown In Vivo. Molecular and Cellular Biology, 2014, 34, 1170-1186. BCAA Supplementation in Mice with Diet-induced Obesity Alters the Metabolome Without Impairing Glucose Homeostasis. Endocrinology, 2021, 162, . Quantitative Measurement of Full-Length and C-Terminal Proteolyzed RBP4 in Serum of Normal and Insulin-Resistant Humans using a Novel Mass Spectrometry Immunoassay. Endocrinology, 2012, 153,	0.6 2.3 2.8	30 28 28
65 66 67 68	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. Diabetes, 2019, 68, 3-14. Downregulation of STRA6 in Adipocytes and Adipose Stromovascular Fraction in Obesity and Effects of Adipocyte-Specific STRA6 Knockdown In Vivo. Molecular and Cellular Biology, 2014, 34, 1170-1186. BCAA Supplementation in Mice with Diet-induced Obesity Alters the Metabolome Without Impairing Glucose Homeostasis. Endocrinology, 2021, 162, . Quantitative Measurement of Full-Length and C-Terminal Proteolyzed RBP4 in Serum of Normal and Insulin-Resistant Humans using a Novel Mass Spectrometry Immunoassay. Endocrinology, 2012, 153, 1519-1527. Adipose tissue dysfunction is associated with low levels of the novel Palmitic Acid Hydroxystearic	0.6 2.3 2.8 2.8	30 28 28 26
65 66 67 68	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. Diabetes, 2019, 68, 3-14. Downregulation of STRA6 in Adipocytes and Adipose Stromovascular Fraction in Obesity and Effects of Adipocyte-Specific STRA6 Knockdown In Vivo. Molecular and Cellular Biology, 2014, 34, 1170-1186. BCAA Supplementation in Mice with Diet-induced Obesity Alters the Metabolome Without Impairing Glucose Homeostasis. Endocrinology, 2021, 162, . Quantitative Measurement of Full-Length and C-Terminal Proteolyzed RBP4 in Serum of Normal and Insulin-Resistant Humans using a Novel Mass Spectrometry Immunoassay. Endocrinology, 2012, 153, 1519-1527. Adipose tissue dysfunction is associated with low levels of the novel Palmitic Acid Hydroxystearic Acids. Scientific Reports, 2018, 8, 15757. Overexpressing the novel autocrine/endocrine adipokine WISP2 induces hyperplasia of the heart,	2.3 2.8 2.8	30 28 28 26

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73	Ca2+/Calmodulin-Dependent Protein Kinase Kinase Is Not Involved in Hypothalamic AMP-Activated Protein Kinase Activation by Neuroglucopenia. PLoS ONE, 2012, 7, e36335.	2.5	7
74	Leptin, GABA, and Glucose Control. Cell Metabolism, 2013, 18, 304-306.	16.2	7
75	Bioactive lipids and metabolic syndromeâ€"a symposium report. Annals of the New York Academy of Sciences, 2022, 1511, 87-106.	3.8	5
76	Palmitic Acid Esters of Hydroxy Stearic Acids Are Hepatic Insulin Sensitizers in Chow and High-Fat Diet (HFD)–Fed Mice. Diabetes, 2018, 67, 1838-P.	0.6	1
77	Acute exercise increases serum retinol binding protein 4 concentrations. FASEB Journal, 2007, 21, A928.	0.5	O
78	De novo Lipogenesis in Adipocytes Results in the Production of Structurally Novel Signaling Lipids with Beneficial Metabolic and Antiâ€inflammatory Effects. FASEB Journal, 2019, 33, 214.1.	0.5	0