Morris F White

List of Publications by Year
in descending order

108 papers	21,076 citations	25034 57 h-index	27406 106 g-index
114 all docs	114 docs citations	114 times ranked	17367 citing authors

#	Article	IF	Citations
1	Disruption of IRS-2 causes type 2 diabetes in mice. Nature, 1998, 391, 900-904.	27.8	1,607
2	Structure of the insulin receptor substrate IRS-1 defines a unique signal transduction protein. Nature, 1991, 352, 73-77.	27.8	1,516
3	Mechanism by Which Fatty Acids Inhibit Insulin Activation of Insulin Receptor Substrate-1 (IRS-1)-associated Phosphatidylinositol 3-Kinase Activity in Muscle. Journal of Biological Chemistry, 2002, 277, 50230-50236.	3.4	1,254
4	The c-Jun NH2-terminal Kinase Promotes Insulin Resistance during Association with Insulin Receptor Substrate-1 and Phosphorylation of Ser307. Journal of Biological Chemistry, 2000, 275, 9047-9054.	3.4	1,216
5	Regulation of insulin sensitivity by serine/threonine phosphorylation of insulin receptor substrate proteins IRS1 and IRS2. Diabetologia, 2012, 55, 2565-2582.	6.3	785
6	IRS proteins and the common path to diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2002, 283, E413-E422.	3.5	757
7	SOCS-1 and SOCS-3 Block Insulin Signaling by Ubiquitin-mediated Degradation of IRS1 and IRS2. Journal of Biological Chemistry, 2002, 277, 42394-42398.	3.4	744
8	Insulin rapidly stimulates tyrosine phosphorylation of a Mr-185,000 protein in intact cells. Nature, 1985, 318, 183-186.	27.8	661
9	Insulin Signaling in Health and Disease. Science, 2003, 302, 1710-1711.	12.6	616
10	The IRS-signalling system: A network of docking proteins that mediate insulin action. Molecular and Cellular Biochemistry, 1998, 182, 3-11.	3.1	534
11	Insulin/IGF-1 and TNF-Î± stimulate phosphorylation of IRS-1 at inhibitory Ser307 via distinct pathways. Journal of Clinical Investigation, 2001, 107, 181-189.	8.2	508
12	The forkhead transcription factor Foxo1 links insulin signaling to Pdx1 regulation of pancreatic Î² cell growth. Journal of Clinical Investigation, 2002, 110, 1839-1847.	8.2	503
13	cAMP promotes pancreatic Î²-cell survival via CREB-mediated induction of IRS2. Genes and Development, 2003, 17, 1575-1580.	5.9	491
14	Irs-2 coordinates Igf-1 receptor-mediated Î²-cell development and peripheral insulin signalling. Nature Genetics, 1999, 23, 32-40.	21.4	486
15	Brain IRS2 Signaling Coordinates Life Span and Nutrient Homeostasis. Science, 2007, 317, 369-372.	12.6	483
16	Insulin Receptor Substrate-2 Deficiency Impairs Brain Growth and Promotes Tau Phosphorylation. Journal of Neuroscience, 2003, 23, 7084-7092.	3.6	434
17	IRS-2 pathways integrate female reproduction and energy homeostasis. Nature, 2000, 407, 377-382.	27.8	425
18	Tissue-specific insulin resistance in mice with mutations in the insulin receptor, IRS-1, and IRS-2. Journal of Clinical Investigation, 2000, 105, 199-205.	8.2	419

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19	Inactivation of Hepatic Foxo1 by Insulin Signaling Is Required for Adaptive Nutrient Homeostasis and Endocrine Growth Regulation. Cell Metabolism, 2008, 8, 65-76.	16.2	400
20	Insulin signaling meets mitochondria in metabolism. Trends in Endocrinology and Metabolism, 2010, 21, 589-598.	7.1	383
21	Mutation of the insulin receptor at tyrosine 960 inhibits signal transmission but does not affect its tyrosine kinase activity. Cell, 1988, 54, 641-649.	28.9	382
22	c-Jun N-terminal Kinase (JNK) Mediates Feedback Inhibition of the Insulin Signaling Cascade. Journal of Biological Chemistry, 2003, 278, 2896-2902.	3.4	355
23	Insulin-Like Signaling, Nutrient Homeostasis, and Life Span. Annual Review of Physiology, 2008, 70, 191-212.	13.1	286
24	Foxo1 integrates insulin signaling with mitochondrial function in the liver. Nature Medicine, 2009, 15, 1307-1311.	30.7	273
25	The IRS-signalling system during insulin and cytokine action. BioEssays, 1997, 19, 491-500.	2.5	271
26	Regulation of glucose homeostasis through a XBP-1â€“FoxO1 interaction. Nature Medicine, 2011, 17, 356-365.	30.7	249
27	Contrasting Effects of IRS-1 Versus IRS-2 Gene Disruption on Carbohydrate and Lipid Metabolism in Vivo. Journal of Biological Chemistry, 2000, 275, 38990-38994.	3.4	247
28	RIP-Cre Revisited, Evidence for Impairments of Pancreatic Î²-Cell Function. Journal of Biological Chemistry, 2006, 281, 2649-2653.	3.4	222
29	Regulation of Insulin/Insulin-like Growth Factor-1 Signaling by Proteasome-mediated Degradation of Insulin Receptor Substrate-2. Journal of Biological Chemistry, 2001, 276, 40362-40367.	3.4	191
30	Exendin-4 Uses Irs2 Signaling to Mediate Pancreatic Î² Cell Growth and Function. Journal of Biological Chemistry, 2006, 281, 1159-1168.	3.4	189
31	Irs1 and Irs2 signaling is essential for hepatic glucose homeostasis and systemic growth. Journal of Clinical Investigation, 2006, 116, 101-114.	8.2	186
32	Targeting Forkhead Box O1 from the Concept to Metabolic Diseases: Lessons from Mouse Models. Antioxidants and Redox Signaling, 2011, 14, 649-661.	5.4	178
33	Insulin Receptor Substrate-2 Binds to the Insulin Receptor through Its Phosphotyrosine-binding Domain and through a Newly Identified Domain Comprising Amino Acids 591â€“786. Journal of Biological Chemistry, 1996, 271, 5980-5983.	3.4	168
34	Irs1 Serine 307 Promotes Insulin Sensitivity in Mice. Cell Metabolism, 2010, 11, 84-92.	16.2	167
35	The Pleckstrin Homology Domain Is the Principle Link between the Insulin Receptor and IRS-1. Journal of Biological Chemistry, 1996, 271, 24300-24306.	3.4	156
36	Insulin Receptor Substrates Irs1 and Irs2 Coordinate Skeletal Muscle Growth and Metabolism via the Akt and AMPK Pathways. Molecular and Cellular Biology, 2011, 31, 430-441.	2.3	147

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37	Regulating insulin signaling and Î²-cell function through IRS proteinsThis paper is one of a selection of papers published in this Special Issue, entitled Second Messengers and Phosphoproteinsâ€"12th International Conference.. Canadian Journal of Physiology and Pharmacology, 2006, 84, 725-737.	1.4	144
38	Human IL6 enhances leptin action in mice. Diabetologia, 2010, 53, 525-535.	6.3	143
39	Mammalian target of rapamycin regulates IRS-1 serine 307 phosphorylation. Biochemical and Biophysical Research Communications, 2004, 316, 533-539.	2.1	136
40	The IRS-2 Gene on Murine Chromosome 8 Encodes a Unique Signaling Adapter for Insulin and Cytokine Action. Molecular Endocrinology, 1997, 11, 251-262.	3.7	133
41	The Irs1 Branch of the Insulin Signaling Cascade Plays a Dominant Role in Hepatic Nutrient Homeostasis. Molecular and Cellular Biology, 2009, 29, 5070-5083.	2.3	132
42	Interleukins 2, 4, 7, and 15 Stimulate Tyrosine Phosphorylation of Insulin Receptor Substrates 1 and 2 in T Cells POTENTIAL ROLE OF JAK KINASES. Journal of Biological Chemistry, 1995, 270, 28527-28530.	3.4	127
43	Growth Hormone, Interferon-Î³, and Leukemia Inhibitory Factor Utilize Insulin Receptor Substrate-2 in Intracellular Signaling. Journal of Biological Chemistry, 1996, 271, 29415-29421.	3.4	116
44	APPL1 Potentiates Insulin Sensitivity by Facilitating the Binding of IRS1/2 to the Insulin Receptor. Cell Reports, 2014, 7, 1227-1238.	6.4	107
45	Insulin action at a molecular level â€" 100 years of progress. Molecular Metabolism, 2021, 52, 101304.	6.5	103
46	Genetic Deficiency of Glycogen Synthase Kinase-3Î² Corrects Diabetes in Mouse Models of Insulin Resistance. PLoS Biology, 2008, 6, e37.	5.6	96
47	IRS2 increases mitochondrial dysfunction and oxidative stress in a mouse model of Huntington disease. Journal of Clinical Investigation, 2011, 121, 4070-4081.	8.2	89
48	Nutrient-dependent and Insulin-stimulated Phosphorylation of Insulin Receptor Substrate-1 on Serine 302 Correlates with Increased Insulin Signaling. Journal of Biological Chemistry, 2004, 279, 3447-3454.	3.4	88
49	Direct Autocrine Action of Insulin on Î²-Cells: Does It Make Physiological Sense?. Diabetes, 2013, 62, 2157-2163.	0.6	85
50	Insulin Receptor Substrates Are Essential for the Bioenergetic and Hypertrophic Response of the Heart to Exercise Training. Molecular and Cellular Biology, 2014, 34, 3450-3460.	2.3	85
51	Insulin and Metabolic Stress Stimulate Multisite Serine/Threonine Phosphorylation of Insulin Receptor Substrate 1 and Inhibit Tyrosine Phosphorylation. Journal of Biological Chemistry, 2014, 289, 12467-12484.	3.4	79
52	IRS proteins and diabetic complications. Diabetologia, 2016, 59, 2280-2291.	6.3	77
53	IRS Pleckstrin Homology Domains Bind to Acidic Motifs in Proteins. Journal of Biological Chemistry, 1998, 273, 31061-31067.	3.4	71
54	Inactivating hepatic follistatin alleviates hyperglycemia. Nature Medicine, 2018, 24, 1058-1069.	30.7	71

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55	Islet-Sparing Effects of Protein Tyrosine Phosphatase-1b Deficiency Delays Onset of Diabetes in IRS2 Knockout Mice. Diabetes, 2004, 53, 61-66.	0.6	69
56	Tyr624 and Tyr628 in Insulin Receptor Substrate-2 Mediate Its Association with the Insulin Receptor. Journal of Biological Chemistry, 1997, 272, 16414-16420.	3.4	65
57	Endotoxemia-mediated activation of acetyltransferase P300 impairs insulin signaling in obesity. Nature Communications, 2017, 8, 131.	12.8	59
58	Signaling Pathways: The Benefits of Good Communication. Current Biology, 2004, 14, R1005-R1007.	3.9	58
59	Inhibition of TNF-Î± Improves the Bladder Dysfunction That Is Associated With Type 2 Diabetes. Diabetes, 2012, 61, 2134-2145.	0.6	57
60	IRS2 Signaling in LepR-b Neurons Suppresses FoxO1 to Control Energy Balance Independently of Leptin Action. Cell Metabolism, 2012, 15, 703-712.	16.2	53
61	G protein-coupled receptors (GPCRs) That Signal via Protein Kinase A (PKA) Cross-talk at Insulin Receptor Substrate 1 (IRS1) to Activate the phosphatidylinositol 3-kinase (PI3K)/AKT Pathway. Journal of Biological Chemistry, 2016, 291, 27160-27169.	3.4	50
62	Phosphorylation of glycolytic and gluconeogenic enzymes by the insulin receptor kinase. Journal of Cellular Biochemistry, 1987, 33, 15-26.	2.6	46
63	Interaction of the insulin receptor kinase with serine/threonine kinases in vitro. Journal of Cellular Biochemistry, 1985, 28, 171-182.	2.6	45
64	Insulin signaling and reduced glucocorticoid receptor activity attenuate postprandial gene expression in liver. PLoS Biology, 2018, 16, e2006249.	5.6	45
65	The IRS-2 Gene on Murine Chromosome 8 Encodes a Unique Signaling Adapter for Insulin and Cytokine Action. Molecular Endocrinology, 1997, 11, 251-262.	3.7	42
66	Cascade of autophosphorylation in the ?-subunit of the insulin receptor. Journal of Cellular Biochemistry, 1989, 39, 429-441.	2.6	38
67	Phosphorylation of Irs1 at SER-522 Inhibits Insulin Signaling. Molecular Endocrinology, 2007, 21, 2294-2302.	3.7	37
68	Irs2 and Irs4 synergize in non-LepRb neurons to control energy balance and glucose homeostasis. Molecular Metabolism, 2014, 3, 55-63.	6.5	37
69	Association of Insulin Receptor Substrate 1 (IRS-1) Y895 with Grb-2 Mediates the Insulin Signaling Involved in IRS-1-Deficient Brown Adipocyte Mitogenesis. Molecular and Cellular Biology, 2001, 21, 2269-2280.	2.3	35
70	The AKTion in non-canonical insulin signaling. Nature Medicine, 2012, 18, 351-353.	30.7	31
71	Elevated circulating follistatin associates with an increased risk of type 2 diabetes. Nature Communications, 2021, 12, 6486.	12.8	31
72	Integrating Metabolism and Longevity Through Insulin and IGF1 Signaling. Endocrinology and Metabolism Clinics of North America, 2013, 42, 127-148.	3.2	30

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73	Serine 302 Phosphorylation of Mouse Insulin Receptor Substrate 1 (IRS1) Is Dispensable for Normal Insulin Signaling and Feedback Regulation by Hepatic S6 Kinase. Journal of Biological Chemistry, 2016, 291, 8602-8617.	3.4	28
74	Hyperglycemia induces vascular smooth muscle cell dedifferentiation by suppressing insulin receptor substrate-1â€“mediated p53/KLF4 complex stabilization. Journal of Biological Chemistry, 2019, 294, 2407-2421.	3.4	28
75	Human Insulin Receptors Expressed in Insulin-Insensitive Mouse Fibroblasts Couple with Extant Cellular Effector Systems to Confer Insulin Sensitivity and Responsiveness*. Endocrinology, 1989, 124, 257-264.	2.8	26
76	Phosphorylation of Forkhead Protein FoxO1 at S253 Regulates Glucose Homeostasis in Mice. Endocrinology, 2019, 160, 1333-1347.	2.8	26
77	Attenuation of Accumulation of Neointimal Lipid by Pioglitazone in Mice Genetically Deficient in Insulin Receptor Substrate-2 and Apolipoprotein E. Journal of Histochemistry and Cytochemistry, 2005, 53, 603-610.	2.5	23
78	Nerve Growth Factor Receptor TrkA, a New Receptor in Insulin Signaling Pathway in PC12 Cells. Journal of Biological Chemistry, 2013, 288, 23807-23813.	3.4	23
79	Tyrosine-Kinase Defect of the Insulin Receptor in Cultured Fibroblasts from Patients with Lipoatropic Diabetes*. Journal of Clinical Endocrinology and Metabolism, 1989, 69, 142-150.	3.6	22
80	Ablation of insulin receptor substrates 1 and 2 suppresses <i>Kras</i> -driven lung tumorigenesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4228-4233.	7.1	22
81	Down-regulation of Insulin Receptor Substrate 1 during Hyperglycemia Induces Vascular Smooth Muscle Cell Dedifferentiation. Journal of Biological Chemistry, 2017, 292, 2009-2020.	3.4	21
82	Interaction of Insulin Receptor Substrate-1 (IRS-1) with Phosphatidylinositol 3-Kinase: Effect of Substitution of Serine for Alanine in Potential IRS-1 Serine Phosphorylation Sites. Endocrinology, 1998, 139, 4911-4919.	2.8	20
83	Insulin Receptor Substrate-2 in Î²-Cells Decreases Diabetes in Nonobese Diabetic Mice. Endocrinology, 2009, 150, 4531-4540.	2.8	19
84	Insulin receptor substrates differentially exacerbate insulin-mediated left ventricular remodeling. JCI Insight, 2020, 5, .	5.0	19
85	The IRS2 Gly1057Asp Variant Is Associated With Human Longevity. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2010, 65A, 282-286.	3.6	16
86	From population to neuron: exploring common mediators for metabolic problems and mental illnesses. Molecular Psychiatry, 2021, 26, 3931-3942.	7.9	16
87	Foxo1 in hepatic lipid metabolism. Cell Cycle, 2010, 9, 219-220.	2.6	15
88	Metformin and Insulin Meet in a Most Atypical Way. Cell Metabolism, 2009, 9, 485-487.	16.2	14
89	Insulin receptor substrate-1 deficiency drives a proinflammatory phenotype in <i>KRAS</i> mutant lung adenocarcinoma. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8795-8800.	7.1	14
90	FoxO1 suppresses Fgf21 during hepatic insulin resistance to impair peripheral glucose utilization and acute cold tolerance. Cell Reports, 2021, 34, 108893.	6.4	14

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91	Extreme makeover of pancreatic Î±-cells. Nature, 2010, 464, 1132-1133.	27.8	12
92	Paraventricular, subparaventricular and periventricular hypothalamic IRS4-expressing neurons are required for normal energy balance. Scientific Reports, 2020, 10, 5546.	3.3	11
93	Insulin receptor substrate 1, but not IRS2, plays a dominant role in regulating pancreatic alpha cell function in mice. Journal of Biological Chemistry, 2021, 296, 100646.	3.4	9
94	Insulin action and type 2 diabetes: lessons from knockout mice. Current Opinion in Endocrinology, Diabetes and Obesity, 1999, 6, 141-145.	0.6	9
95	Phosphorylation of the solubilized insulin receptor by the gene product of the Rous sarcoma virus, pp60src. Journal of Cellular Biochemistry, 1984, 26, 169-179.	2.6	8
96	Trimeprazine increases IRS2 in human islets and promotes pancreatic Î² cell growth and function in mice. JCI Insight, 2016, 1, .	5.0	8
97	IRS1Ser307 phosphorylation does not mediate mTORC1-induced insulin resistance. Biochemical and Biophysical Research Communications, 2014, 443, 689-693.	2.1	7
98	The Mechanisms of Insulin Action. , 2016, , 556-585.e13.		7
99	Irs2 deficiency alters hippocampus-associated behaviors during young adulthood. Biochemical and Biophysical Research Communications, 2021, 559, 148-154.	2.1	6
100	TAZ inhibits glucocorticoid receptor and coordinates hepatic glucose homeostasis in normal physiological states. ELife, 2021, 10, .	6.0	6
101	The P300 acetyltransferase inhibitor C646 promotes membrane translocation of insulin receptor protein substrate and interaction with the insulin receptor. Journal of Biological Chemistry, 2022, 298, 101621.	3.4	6
102	kNOXing on the Door of Selective Insulin Resistance. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 1063-1065.	2.4	4
103	The Mechanisms of Insulin Action. , 2010, , 636-659.		3
104	Molecular Mechanisms of Signal Transduction by Tyrosine Kinase Receptors. Journal of Animal Science, 1993, 71, 3-22.	0.5	2
105	Mapping the path to a longer life. Nature, 2015, 524, 170-171.	27.8	1
106	The Role of Insulinâ€like Signaling for the Central and Peripheral Regulation of Nutrient Homeostasis and Life Span. FASEB Journal, 2009, 23, 329.2.	0.5	0
107	Receptor Tyrosine Kinases and the Insulin Signaling System. Endocrinology, 2017, , 1-34.	0.1	0
108	Receptor Tyrosine Kinases and the Insulin Signaling System. Endocrinology, 2018, , 121-155.	0.1	0