Harinder Hundal

List of Publications by Year
in descending order

104 papers	6,661 citations	61687 45 h-index	73587 79 g-index
104 all docs	104 docs citations	104 times ranked	8765 citing authors

#	Article	IF	Citations
1	Constitutive activation of protein kinase B alpha by membrane targeting promotes glucose and system A amino acid transport, protein synthesis, and inactivation of glycogen synthase kinase 3 in L6 muscle cells. Diabetes, 1998, 47, 1006-1013.	0.3	309
2	Amino acid transporters: roles in amino acid sensing and signalling in animal cells. Biochemical Journal, 2003, 373, 1-18.	1.7	308
3	Ceramide Disables 3-Phosphoinositide Binding to the Pleckstrin Homology Domain of Protein Kinase B (PKB)/Akt by a PKCÎ¶-Dependent Mechanism. Molecular and Cellular Biology, 2003, 23, 7794-7808.	1.1	305
4	Amino acid transceptors: gate keepers of nutrient exchange and regulators of nutrient signaling. American Journal of Physiology - Endocrinology and Metabolism, 2009, 296, E603-E613.	1.8	264
5	Protein kinase B (PKB/Akt) - a key regulator of glucose transport?. FEBS Letters, 2001, 492, 199-203.	1.3	238
6	Intracellular ceramide synthesis and protein kinase CÎ¶ activation play an essential role in palmitate-induced insulin resistance in rat L6 skeletal muscle cells. Biochemical Journal, 2004, 382, 619-629.	1.7	230
7	Ceramide impairs the insulin-dependent membrane recruitment of Protein Kinase B leading to a loss in downstream signalling in L6 skeletal muscle cells. Diabetologia, 2001, 44, 173-183.	2.9	202
8	Differential effects of palmitate and palmitoleate on insulin action and glucose utilization in rat L6 skeletal muscle cells. Biochemical Journal, 2006, 399, 473-481.	1.7	199
9	l-Leucine availability regulates phosphatidylinositol 3-kinase, p70 S6 kinase and glycogen synthase kinase-3 activity in L6 muscle cells: evidence for the involvement of the mammalian target of rapamycin (mTOR) pathway in the l-leucine-induced up-regulation of System A amino acid transport. Biochemical Journal, 2000, 350, 361-368.	1.7	179
10	Activation of glucose transport by AMP-activated protein kinase via stimulation of nitric oxide synthase. Diabetes, 2000, 49, 1978-1985.	0.3	157
11	Regulation of Glucose Transport and Glycogen Synthesis in L6 Muscle Cells during Oxidative Stress. Journal of Biological Chemistry, 1999, 274, 36293-36299.	1.6	153
12	Lipid modulation of skeletal muscle mass and function. Journal of Cachexia, Sarcopenia and Muscle, 2017, 8, 190-201.	2.9	153
13	Intracellular Sensing of Amino Acids in Xenopus laevis Oocytes Stimulates p70 S6 Kinase in a Target of Rapamycin-dependent Manner. Journal of Biological Chemistry, 2002, 277, 9952-9957.	1.6	112
14	Serotonin (5-Hydroxytryptamine), a Novel Regulator of Glucose Transport in Rat Skeletal Muscle. Journal of Biological Chemistry, 1999, 274, 13563-13568.	1.6	108
15	Distinct Sensor Pathways in the Hierarchical Control of SNAT2, a Putative Amino Acid Transceptor, by Amino Acid Availability. Journal of Biological Chemistry, 2007, 282, 19788-19798.	1.6	108
16	Characteristics of Lâ€glutamine transport in perfused rat skeletal muscle.. Journal of Physiology, 1987, 393, 283-305.	1.3	107
17	Ceramide downâ€regulates System A amino acid transport and protein synthesis in rat skeletal muscle cells. FASEB Journal, 2005, 19, 1-24.	0.2	106
18	Targeting of PKCÎ¶ and PKB to caveolin-enriched microdomains represents a crucial step underpinning the disruption in PKB-directed signalling by ceramide. Biochemical Journal, 2008, 410, 369-379.	1.7	99

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19	Use of Akt Inhibitor and a Drug-resistant Mutant Validates a Critical Role for Protein Kinase B/Akt in the Insulin-dependent Regulation of Glucose and System A Amino Acid Uptake. Journal of Biological Chemistry, 2008, 283, 27653-27667.	1.6	96
20	Skeletal muscle glutamine transport, intramuscular glutamine concentration, and muscle-protein turnover. Metabolism: Clinical and Experimental, 1989, 38, 47-51.	1.5	94
21	ABC50 Promotes Translation Initiation in Mammalian Cells. Journal of Biological Chemistry, 2009, 284, 24061-24073.	1.6	91
22	Insulin Promotes the Cell Surface Recruitment of the SAT2/ATA2 System A Amino Acid Transporter from an Endosomal Compartment in Skeletal Muscle Cells. Journal of Biological Chemistry, 2002, 277, 13628-13634.	1.6	90
23	Defining the Contribution of AMP-activated Protein Kinase (AMPK) and Protein Kinase C (PKC) in Regulation of Glucose Uptake by Metformin in Skeletal Muscle Cells. Journal of Biological Chemistry, 2012, 287, 20088-20099.	1.6	84
24	Proinflammatory NFkB signalling promotes mitochondrial dysfunction in skeletal muscle in response to cellular fuel overloading. Cellular and Molecular Life Sciences, 2019, 76, 4887-4904.	2.4	84
25	Subcellular localization and adaptive up-regulation of the System A (SAT2) amino acid transporter in skeletal-muscle cells and adipocytes. Biochemical Journal, 2001, 355, 563-568.	1.7	78
26	Modulating serine palmitoyl transferase (SPT) expression and activity unveils a crucial role in lipid-induced insulin resistance in rat skeletal muscle cells. Biochemical Journal, 2009, 417, 791-801.	1.7	77
27	l(+)-Lactate transport perfused rat skeletal muscle: kinetic characteristics and sensitivity to pH and transport inhibitors. Biochimica Et Biophysica Acta - Biomembranes, 1988, 944, 213-222.	1.4	75
28	Counter-modulation of fatty acid-induced pro-inflammatory nuclear factor Î°B signalling in rat skeletal muscle cells by AMP-activated protein kinase. Biochemical Journal, 2011, 435, 463-474.	1.7	69
29	Expression of Î² subunit isoforms of the Na+,K+-ATPase is muscle type-specific. FEBS Letters, 1993, 328, 253-258.	1.3	68
30	Identification and characterization of two distinct intracellular GLUT4 pools in rat skeletal muscle: evidence for an endosomal and an insulin-sensitive GLUT4 compartment. Biochemical Journal, 1997, 325, 727-732.	1.7	68
31	Mechanisms involved in the enhancement of mammalian target of rapamycin signalling and hypertrophy in skeletal muscle of myostatinâ€deficient mice. FEBS Letters, 2010, 584, 2403-2408.	1.3	67
32	Tertiary active transport of amino acids reconstituted by coexpression of System A and L transporters in<i>Xenopus</i>oocytes. American Journal of Physiology - Endocrinology and Metabolism, 2009, 297, E822-E829.	1.8	66
33	Regulation of MAP Kinaseâ€"Directed Mitogenic and Protein Kinase Bâ€"Mediated Signaling by Cannabinoid Receptor Type 1 in Skeletal Muscle Cells. Diabetes, 2010, 59, 375-385.	0.3	66
34	Momordica charantia fruit juice stimulates glucose and amino acid uptakes in L6 myotubes. Molecular and Cellular Biochemistry, 2004, 261, 99-104.	1.4	65
35	Sphingolipids: agents provocateurs in the pathogenesis of insulin resistance. Diabetologia, 2011, 54, 1596-1607.	2.9	65
36	Modulation of cellular redox homeostasis by the endocannabinoid system. Open Biology, 2016, 6, 150276.	1.5	63

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37	Subcellular distribution and immunocytochemical localization of Na,K-ATPase subunit isoforms in human skeletal muscle. Molecular Membrane Biology, 1994, 11, 255-262.	2.0	61
38	SNAT2 transceptor signalling via mTOR A role in cell growth and proliferation. Frontiers in Bioscience - Elite, 2011, E3, 1289-1299.	0.9	59
39	Fructose uptake in rat adipocytes: GLUT5 expression and the effects of streptozotocin-induced diabetes. Diabetologia, 1998, 41, 821-828.	2.9	58
40	Use of lithium and SB-415286 to explore the role of glycogen synthase kinase-3 in the regulation of glucose transport and glycogen synthase. FEBS Journal, 2003, 270, 3829-3838.	0.2	56
41	GSK3-mediated raptor phosphorylation supports amino-acid-dependent mTORC1-directed signalling. Biochemical Journal, 2015, 470, 207-221.	1.7	55
42	Glutamine Metabolism and Transport in Skeletal Muscle and Heart and Their Clinical Relevance. Journal of Nutrition, 1996, 126, 1142S-1149S.	1.3	54
43	Constitutive Activation of GSK3 Down-regulates Glycogen Synthase Abundance and Glycogen Deposition in Rat Skeletal Muscle Cells. Journal of Biological Chemistry, 2005, 280, 9509-9518.	1.6	53
44	A role for the actin cytoskeleton in the hormonal and growth-factor-mediated activation of protein kinase B. Biochemical Journal, 2000, 352, 617-622.	1.7	49
45	Ganglioside GM3 as a gatekeeper of obesityâ€associated insulin resistance: Evidence and mechanisms. FEBS Letters, 2015, 589, 3221-3227.	1.3	47
46	Regulation of System A amino acid transport in L6 rat skeletal muscle cells by insulin, chemical and hyperthermic stress. FEBS Letters, 1998, 441, 15-19.	1.3	46
47	Iron depletion suppresses mTORC1-directed signalling in intestinal Caco-2 cells via induction of REDD1. Cellular Signalling, 2016, 28, 412-424.	1.7	46
48	GPR55 deficiency is associated with increased adiposity and impaired insulin signaling in peripheral metabolic tissues. FASEB Journal, 2019, 33, 1299-1312.	0.2	46
49	l-Leucine availability regulates phosphatidylinositol 3-kinase, p70 S6 kinase and glycogen synthase kinase-3 activity in L6 muscle cells: evidence for the involvement of the mammalian target of rapamycin (mTOR) pathway in the l-leucine-induced up-regulation of System A amino acid transport. Biochemical Journal, 2000, 350, 361.	1.7	44
50	Characterising the Inhibitory Actions of Ceramide upon Insulin Signaling in Different Skeletal Muscle Cell Models: A Mechanistic Insight. PLoS ONE, 2014, 9, e101865.	1.1	44
51	Intracellular signalling mechanisms regulating glucose transport in insulin-sensitive tissues. Molecular Membrane Biology, 2001, 18, 195-204.	2.0	42
52	Is REDD1 a Metabolic Ã‰minence Grise ?. Trends in Endocrinology and Metabolism, 2016, 27, 868-880.	3.1	42
53	Fructose transport and metabolism in adipose tissue of Zucker rats: Diminished GLUT5 activity during obesity and insulin resistance. Molecular and Cellular Biochemistry, 2004, 261, 23-33.	1.4	41
54	Carnosic acid stimulates glucose uptake in skeletal muscle cells via a PME-1/PP2A/PKB signalling axis. Cellular Signalling, 2014, 26, 2343-2349.	1.7	39

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55	Michael John Rennie, MSc, PhD, FRSE, FHEA, 1946â€“2017: an appreciation of his work on protein metabolism in human muscle. American Journal of Clinical Nutrition, 2017, 106, 1-9.	2.2	39
56	Evidence for allosteric regulation of pH-sensitive System A (SNAT2) and System N (SNAT5) amino acid transporter activity involving a conserved histidine residue. Biochemical Journal, 2006, 397, 369-375.	1.7	37
57	Biochemical and functional characterization of the GLUT5 fructose transporter in rat skeletal muscle. Biochemical Journal, 1998, 336, 361-366.	1.7	36
58	Mechanisms of Glutamine Transport in Rat Adipocytes and Acute Regulation by Cell Swelling. Cellular Physiology and Biochemistry, 2001, 11, 259-270.	1.1	36
59	Defining the role of DAG, mitochondrial function, and lipid deposition in palmitate-induced proinflammatory signaling and its counter-modulation by palmitoleate. Journal of Lipid Research, 2013, 54, 2366-2378.	2.0	36
60	Transport of glutamine inXenopus laevis oocytes: Relationship with transport of other amino acids. Journal of Membrane Biology, 1989, 112, 149-157.	1.0	35
61	Effects of Limb Immobilization on Cytochrome C Oxidase Activity and GLUT4 and GLUT5 Protein Expression in Human Skeletal Muscle. Clinical Science, 1996, 91, 591-599.	1.8	35
62	Proteasomal Modulation of Cellular SNAT2 (SLC38A2) Abundance and Function by Unsaturated Fatty Acid Availability. Journal of Biological Chemistry, 2015, 290, 8173-8184.	1.6	35
63	The PPARÎ´ agonist, GW501516, promotes fatty acid oxidation but has no direct effect on glucose utilisation or insulin sensitivity in rat L6 skeletal muscle cells. FEBS Letters, 2007, 581, 4743-4748.	1.3	33
64	Rab4, But Not the Transferrin Receptor, Is Colocalized with GLUT4 in an Insulin-Sensitive Intracellular Compartment in Rat Skeletal Muscle. Biochemical and Biophysical Research Communications, 1995, 215, 321-328.	1.0	32
65	Mitochondria: a possible nexus for the regulation of energy homeostasis by the endocannabinoid system?. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E1-E13.	1.8	32
66	Effects of corticosteroid on the transport and metabolism of glutamine in rat skeletal muscle. Biochimica Et Biophysica Acta - Molecular Cell Research, 1991, 1092, 376-383.	1.9	31
67	Chronic Effects of Palmitate Overload on Nutrient-Induced Insulin Secretion and Autocrine Signalling in Pancreatic MIN6 Beta Cells. PLoS ONE, 2011, 6, e25975.	1.1	31
68	Inositol Phospholipid 3-Kinase is Activated by Cellular Stress but is not Required for the Stress-Induced Activation of Glucose Transport in L6 Rat Skeletal Muscle Cells. FEBS Journal, 1997, 247, 306-313.	0.2	30
69	Glucose transport correlates with GLUT2 abundance in rat liver during altered thyroid status. Molecular and Cellular Endocrinology, 1997, 128, 97-102.	1.6	29
70	Biochemical Localisation of the 5-HT2A(serotonin) Receptor in Rat Skeletal Muscle. Biochemical and Biophysical Research Communications, 1999, 257, 369-372.	1.0	29
71	Characterization of Glucose Transport and Glucose Transporters in the Human Choriocarcinoma Cell Line, BeWo. Placenta, 1999, 20, 651-659.	0.7	28
72	Lactate transport in rat adipocytes: identification of monocarboxylate transporter 1 (MCT1) and its modulation during streptozotocin-induced diabetes. FEBS Letters, 2000, 479, 89-92.	1.3	28

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73	<scp>CB</scp>1 receptor blockade counters ageâ€induced insulin resistance and metabolic dysfunction. Aging Cell, 2016, 15, 325-335.	3.0	28
74	Amino acid transport in heart and skeletal muscle and the functional consequences. Biochemical Society Transactions, 1996, 24, 869-874.	1.6	26
75	Cellular depletion of atypical PKCÎ» is associated with enhanced insulin sensitivity and glucose uptake in L6 rat skeletal muscle cells. American Journal of Physiology - Endocrinology and Metabolism, 2010, 299, E402-E412.	1.8	24
76	Enhanced Insulin Sensitivity Associated with Provision of Mono and Polyunsaturated Fatty Acids in Skeletal Muscle Cells Involves Counter Modulation of PP2A. PLoS ONE, 2014, 9, e92255.	1.1	24
77	Effects of Sodium and Amino Acid Substrate Availability upon the Expression and Stability of the SNAT2 (SLC38A2) Amino Acid Transporter. Frontiers in Pharmacology, 2018, 9, 63.	1.6	24
78	Signalling mechanisms underlying the rapid and additive stimulation of NKCC activity by insulin and hypertonicity in rat L6 skeletal muscle cells. Journal of Physiology, 2004, 560, 123-136.	1.3	23
79	Insulin-Stimulated Glucose Uptake Does Not Require p38 Mitogen-Activated Protein Kinase in Adipose Tissue or Skeletal Muscle. Diabetes, 2005, 54, 3161-3168.	0.3	23
80	Crumbs 3b promotes tight junctions in an ezrin-dependent manner in mammalian cells. Journal of Molecular Cell Biology, 2016, 8, 439-455.	1.5	23
81	Proteolytic cleavage of cellubrevin and vesicle-associated membrane protein (VAMP) by tetanus toxin does not impair insulin-stimulated glucose transport or GLUT4 translocation in rat adipocytes. Biochemical Journal, 1997, 321, 233-238.	1.7	22
82	GLUT5 Expression and Fructose Transport in Human Skeletal Muscle. Advances in Experimental Medicine and Biology, 1998, 441, 35-45.	0.8	22
83	Mitochondrial Substrate Availability and Its Role in Lipid-Induced Insulin Resistance and Proinflammatory Signaling in Skeletal Muscle. Diabetes, 2013, 62, 3426-3436.	0.3	21
84	The endocannabinoid system: â€˜NOâ€™ longer anonymous in the control of nitrergic signalling?. Journal of Molecular Cell Biology, 2017, 9, 91-103.	1.5	21
85	Caveolinâ€3 deficiency associated with the dystrophy P104L mutation impairs skeletal muscle mitochondrial form and function. Journal of Cachexia, Sarcopenia and Muscle, 2020, 11, 838-858.	2.9	19
86	A role for the actin cytoskeleton in the hormonal and growth-factor-mediated activation of protein kinase B. Biochemical Journal, 2000, 352, 617.	1.7	18
87	Identification and Biochemical Localization of a Na-K-Cl Cotransporter in the Human Placental Cell Line BeWo. Biochemical and Biophysical Research Communications, 2000, 274, 43-48.	1.0	18
88	Regulation of amino acid transporters by amino acid availability. Current Opinion in Clinical Nutrition and Metabolic Care, 2001, 4, 425-431.	1.3	18
89	Insulin regulates the expression of the GLUT5 transporter in L6 skeletal muscle cells. FEBS Letters, 2003, 549, 77-82.	1.3	16
90	New vistas for treatment of obesity and diabetes? Endocannabinoid signalling and metabolism in the modulation of energy balance. BioEssays, 2012, 34, 681-691.	1.2	15

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91	NEU3 sialidase as a marker of insulin sensitivity: Regulation by fatty acids. Cellular Signalling, 2015, 27, 1742-1750.	1.7	15
92	Expression and modulation of TUB by insulin and thyroid hormone in primary rat and murine 3T3-L1 adipocytes. Biochemical and Biophysical Research Communications, 2009, 390, 1328-1333.	1.0	12
93	Combined Hyperglycemia- and Hyperinsulinemia-Induced Insulin Resistance in Adipocytes Is Associated With Dual Signaling Defects Mediated by PKC-Î¶. Endocrinology, 2018, 159, 1658-1677.	1.4	11
94	Sedimentation and immunological analyses of GLUT4 and Î±2-Na,K-ATPase subunit-containing vesicles from rat skeletal muscle: evidence for segregation. FEBS Letters, 1995, 376, 211-215.	1.3	10
95	Regulation of Glucose Transporters and the Na/K-ATPase by Insulin in Skeletal Muscle. Advances in Experimental Medicine and Biology, 1993, 334, 63-78.	0.8	9
96	Mono- and Polyunsaturated Fatty Acids Counter Palmitate-Induced Mitochondrial Dysfunction in Rat Skeletal Muscle Cells. Cellular Physiology and Biochemistry, 2020, 54, 975-993.	1.1	8
97	A role for membrane transport in modulation of intramuscular free glutamine turnover in streptozotocin diabetic rats. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1992, 1180, 137-146.	1.8	6
98	CDK7 is a component of the integrated stress response regulating SNAT2 (SLC38A2)/System A adaptation in response to cellular amino acid deprivation. Biochimica Et Biophysica Acta - Molecular Cell Research, 2019, 1866, 978-991.	1.9	6
99	Analyses of the co-localization of cellubrevin and the GLUT4 glucose transporter in rat and human insulin-responsive tissues. FEBS Letters, 1996, 395, 211-216.	1.3	5
100	GLUT5 and fructose transport in human skeletal muscle. Biochemical Society Transactions, 1997, 25, 473S-473S.	1.6	5
101	Endocannabinoids in obesity: brewing up the perfect metabolic storm?. Environmental Sciences Europe, 2013, 2, 49-63.	2.6	4
102	Do subcellular fractionation studies of skeletal muscle yield useful information regarding sarcolemmal components?. FEBS Letters, 1996, 384, 204-205.	1.3	3
103	Generation, validation and humanisation of a novel insulin resistant cell model. Biochemical Pharmacology, 2010, 80, 1042-1049.	2.0	3
104	Isolation and characterization of two intracellular GLUT4 glucose transporter pools in rat skeletal muscle. Biochemical Society Transactions, 1996, 24, 190S-190S.	1.6	2