Paul F Pilch

List of Publications by Year
in descending order

104 papers	8,412 citations	41323 49 h-index	45285 90 g-index
107 all docs	107 docs citations	107 times ranked	7772 citing authors

#	Article	IF	Citations
1	An AMPK-dependent, non-canonical p53 pathway plays a key role in adipocyte metabolic reprogramming. ELife, 2020, 9, .	2.8	4
2	Cavin-1/PTRF mediates insulin-dependent focal adhesion remodeling and ameliorates high-fat dietâ€"induced inflammatory responses in mice. Journal of Biological Chemistry, 2019, 294, 10544-10552.	1.6	9
3	Interaction of suppressor of cytokine signalling 3 with cavin-1 links SOCS3 function and cavin-1 stability. Nature Communications, 2018, 9, 168.	5.8	25
4	Muscular dystrophy in PTFR/cavin-1 null mice. JCI Insight, 2017, 2, e91023.	2.3	19
5	PTRF/Cavin-1 promotes efficient ribosomal RNA transcription in response to metabolic challenges. ELife, 2016, 5, .	2.8	48
6	Adiporedoxin, an upstream regulator of ER oxidative folding and protein secretion in adipocytes. Molecular Metabolism, 2015, 4, 758-770.	3.0	5
7	The caveolinâ€"cavin system plays a conserved and critical role in mechanoprotection of skeletal muscle. Journal of Cell Biology, 2015, 210, 833-849.	2.3	133
8	Region-specific variation in the properties of skeletal adipocytes reveals regulated and constitutive marrow adipose tissues. Nature Communications, 2015, 6, 7808.	5.8	332
9	Cavin-3 Knockout Mice Show that Cavin-3 Is Not Essential for Caveolae Formation, for Maintenance of Body Composition, or for Glucose Tolerance. PLoS ONE, 2014, 9, e102935.	1.1	16
10	Pleiotropic Effects of Cavin-1 Deficiency on Lipid Metabolism. Journal of Biological Chemistry, 2014, 289, 8473-8483.	1.6	55
11	Caveolin-1 Is Necessary for Hepatic Oxidative Lipid Metabolism: Evidence for Crosstalk between Caveolin-1 and Bile Acid Signaling. Cell Reports, 2013, 4, 238-247.	2.9	56
12	IDOL Stimulates Clathrin-Independent Endocytosis and Multivesicular Body-Mediated Lysosomal Degradation of the Low-Density Lipoprotein Receptor. Molecular and Cellular Biology, 2013, 33, 1503-1514.	1.1	68
13	Cavin1; a Regulator of Lung Function and Macrophage Phenotype. PLoS ONE, 2013, 8, e62045.	1.1	25
14	Cavinâ€•1/PTRF as a new substrate of the SOCS3 E3 ubiquitin ligase complex. FASEB Journal, 2013, 27, 782.1.	0.2	0
15	Co-Regulation of Cell Polarization and Migration by Caveolar Proteins PTRF/Cavin-1 and Caveolin-1. PLoS ONE, 2012, 7, e43041.	1.1	49
16	Caveolae, Fenestrae and Transendothelial Channels Retain PV1 on the Surface of Endothelial Cells. PLoS ONE, 2012, 7, e32655.	1.1	37
17	Cholesterol Depletion in Adipocytes Causes Caveolae Collapse Concomitant with Proteosomal Degradation of Cavin-2 in a Switch-Like Fashion. PLoS ONE, 2012, 7, e34516.	1.1	58
18	Fat caves: caveolae, lipid trafficking and lipid metabolism in adipocytes. Trends in Endocrinology and Metabolism, 2011, 22, 318-324.	3.1	102

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19	The Sugar Is sIRVed: Sorting Glut4 and Its Fellow Travelers. Traffic, 2011, 12, 665-671.	1.3	77
20	Caveolae and lipid trafficking in adipocytes. Clinical Lipidology, 2011, 6, 49-58.	0.4	29
21	Caveolins/caveolae protect adipocytes from fatty acid-mediated lipotoxicity. Journal of Lipid Research, 2011, 52, 1526-1532.	2.0	21
22	Clathrin-independent carriers form a high capacity endocytic sorting system at the leading edge of migrating cells. Journal of Cell Biology, 2010, 190, 675-691.	2.3	263
23	Caveolins sequester FA on the cytoplasmic leaflet of the plasma membrane, augment triglyceride formation, and protect cells from lipotoxicity. Journal of Lipid Research, 2010, 51, 914-922.	2.0	16
24	Proteomic Analysis of GLUT4 Storage Vesicles Reveals LRP1 to Be an Important Vesicle Component and Target of Insulin Signaling. Journal of Biological Chemistry, 2010, 285, 104-114.	1.6	113
25	Caveolins sequester FA on the cytoplasmic leaflet of the plasma membrane, augment triglyceride formation, and protect cells from lipotoxicity. Journal of Lipid Research, 2010, 51, 914-922.	2.0	23
26	Insulin Resistance and Altered Systemic Glucose Metabolism in Mice Lacking Nur77. Diabetes, 2009, 58, 2788-2796.	0.3	132
27	MURC/Cavin-4 and cavin family members form tissue-specific caveolar complexes. Journal of Cell Biology, 2009, 185, 1259-1273.	2.3	243
28	Deletion of Cavin/PTRF Causes Global Loss of Caveolae, Dyslipidemia, and Glucose Intolerance. Cell Metabolism, 2008, 8, 310-317.	7.2	313
29	A Critical Role of Cavin (Polymerase I and Transcript Release Factor) in Caveolae Formation and Organization. Journal of Biological Chemistry, 2008, 283, 4314-4322.	1.6	244
30	The Interaction of Akt with APPL1 Is Required for Insulin-stimulated Glut4 Translocation. Journal of Biological Chemistry, 2007, 282, 32280-32287.	1.6	107
31	Nur77 Coordinately Regulates Expression of Genes Linked to Glucose Metabolism in Skeletal Muscle. Molecular Endocrinology, 2007, 21, 2152-2163.	3.7	149
32	Cellular spelunking: exploring adipocyte caveolae. Journal of Lipid Research, 2007, 48, 2103-2111.	2.0	60
33	Regulation of glycogen concentration and glycogen synthase activity in skeletal muscle of insulin-resistant rats. Archives of Biochemistry and Biophysics, 2007, 464, 144-150.	1.4	14
34	Isolation of GLUT4 Storage Vesicles. Current Protocols in Cell Biology, 2006, 30, Unit 3.20.	2.3	5
35	Role of Caveolin-1 and Cholesterol in Transmembrane Fatty Acid Movementâ€. Biochemistry, 2006, 45, 2882-2893.	1.2	89
36	Dynamics of Lipid Droplet-Associated Proteins during Hormonally Stimulated Lipolysis in Engineered Adipocytes: Stabilization and Lipid Droplet Binding of Adipocyte Differentiation-Related Protein/Adipophilin. Molecular Endocrinology, 2006, 20, 459-466.	3.7	47

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37	Pharmacological Targeting of Adipocytes/Fat Metabolism for Treatment of Obesity and Diabetes. Molecular Pharmacology, 2006, 70, 779-785.	1.0	28
38	Role of Insulin-dependent Cortical Fodrin/Spectrin Remodeling in Glucose Transporter 4 Translocation in Rat Adipocytes. Molecular Biology of the Cell, 2006, 17, 4249-4256.	0.9	28
39	Dissociation of Insulin Receptor Expression and Signaling from Caveolin-1 Expression. Journal of Biological Chemistry, 2005, 280, 13483-13486.	1.6	24
40	p115 Interacts with the GLUT4 Vesicle Protein, IRAP, and Plays a Critical Role in Insulin-stimulated GLUT4 Translocation. Molecular Biology of the Cell, 2005, 16, 2882-2890.	0.9	81
41	Insulin Receptor Family. , 2004, , 436-440.		2
42	Glut4 Storage Vesicles without Glut4: Transcriptional Regulation of Insulin-Dependent Vesicular Traffic. Molecular and Cellular Biology, 2004, 24, 7151-7162.	1.1	37
43	Acyl Coenzyme A Synthetase Regulation: Putative Role in Longâ€Chain Acyl Coenzyme A Partitioning. Obesity, 2004, 12, 1781-1788.	4.0	27
44	ERK6 is expressed in a developmentally regulated manner in rodent skeletal muscle. Biochemical and Biophysical Research Communications, 2003, 306, 163-168.	1.0	23
45	Rapid Flip-flop of Oleic Acid across the Plasma Membrane of Adipocytes. Journal of Biological Chemistry, 2003, 278, 7988-7995.	1.6	107
46	Immunopurification and Characterization of Rat Adipocyte Caveolae Suggest Their Dissociation from Insulin Signaling. Journal of Biological Chemistry, 2003, 278, 18321-18329.	1.6	88
47	The Formin Family Protein, Formin Homolog Overexpressed in Spleen, Interacts with the Insulin-Responsive Aminopeptidase and Profilin IIa. Molecular Endocrinology, 2003, 17, 1216-1229.	3.7	45
48	C₂C₁₂myocytes lack an insulin-responsive vesicular compartment despite dexamethasone-induced GLUT4 expression. American Journal of Physiology - Endocrinology and Metabolism, 2002, 283, E514-E524.	1.8	54
49	Critical Proliferation-independent Window for Basic Fibroblast Growth Factor Repression of Myogenesis via the p42/p44 MAPK Signaling Pathway. Journal of Biological Chemistry, 2001, 276, 13709-13717.	1.6	86
50	UCP-3 expression in skeletal muscle: effects of exercise, hypoxia, and AMP-activated protein kinase. American Journal of Physiology - Endocrinology and Metabolism, 2000, 279, E622-E629.	1.8	133
51	Insulin-mediated translocation of GLUT-4-containing vesicles is preserved in denervated muscles. American Journal of Physiology - Endocrinology and Metabolism, 2000, 278, E1019-E1026.	1.8	16
52	Dynamics of Protein-tyrosine Phosphatases in Rat Adipocytes. Journal of Biological Chemistry, 2000, 275, 6308-6312.	1.6	81
53	Insulin Activation of Mitogen-Activated Protein (MAP) Kinase and Akt Is Phosphatidylinositol 3-Kinase-Dependent in Rat Adipocytes. Biochemical and Biophysical Research Communications, 2000, 274, 845-851.	1.0	16
54	Insulin-Dependent Phosphorylation of a 70-kDa Protein in Light Microsomes from Rat Adipocytes. Biochemical and Biophysical Research Communications, 2000, 276, 1302-1305.	1.0	2

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55	Structural Studies of the Detergent-solubilized and Vesicle-reconstituted Insulin Receptor. Journal of Biological Chemistry, 1999, 274, 34981-34992.	1.6	28
56	Separation and Partial Characterization of Three Distinct Intracellular GLUT4 Compartments in Rat Adipocytes. Journal of Biological Chemistry, 1999, 274, 37755-37762.	1.6	33
57	The Formation of an Insulin-responsive Vesicular Cargo Compartment Is an Early Event in 3T3-L1 Adipocyte Differentiation. Molecular Biology of the Cell, 1999, 10, 1581-1594.	0.9	67
58	Reconstitution of Insulin-sensitive Glucose Transport in Fibroblasts Requires Expression of Both PPARÎ³ and C/EBPÎ±. Journal of Biological Chemistry, 1999, 274, 7946-7951.	1.6	188
59	Role of PPARgamma in Regulating Adipocyte Differentiation and Insulin-Responsive Glucose Uptake. Annals of the New York Academy of Sciences, 1999, 892, 134-145.	1.8	107
60	Separation of IRS-1 and PI3-Kinase from GLUT4 Vesicles in Rat Skeletal Muscle. Biochemical and Biophysical Research Communications, 1998, 246, 282-286.	1.0	12
61	Induction of Akt-2 Correlates with Differentiation in Sol8 Muscle Cells. Biochemical and Biophysical Research Communications, 1998, 251, 835-841.	1.0	46
62	Insulin Increases the Association of Akt-2 with Glut4-containing Vesicles. Journal of Biological Chemistry, 1998, 273, 7201-7204.	1.6	204
63	Multiple endosomal recycling pathways in rat adipose cells. Biochemical Journal, 1998, 331, 829-835.	1.7	63
64	Insulin-dependent protein trafficking in skeletal muscle cells. American Journal of Physiology - Endocrinology and Metabolism, 1998, 275, E187-E196.	1.8	42
65	Bidirectional regulation of uncoupling protein-3 and GLUT-4 mRNA in skeletal muscle by cold. American Journal of Physiology - Endocrinology and Metabolism, 1998, 275, E386-E391.	1.8	35
66	Tumor Necrosis Factor-Î±-induced Insulin Resistance in 3T3-L1 Adipocytes Is Accompanied by a Loss of Insulin Receptor Substrate-1 and GLUT4 Expression without a Loss of Insulin Receptor-mediated Signal Transduction. Journal of Biological Chemistry, 1997, 272, 971-976.	1.6	456
67	Sortilin Is a Major Protein Component of Glut4-containing Vesicles. Journal of Biological Chemistry, 1997, 272, 24145-24147.	1.6	101
68	Conformational Changes of the Insulin Receptor upon Insulin Binding and Activation As Monitored by Fluorescence Spectroscopyâ€. Biochemistry, 1997, 36, 2701-2708.	1.2	53
69	GLUT4-containing vesicles in rat adipocytes as a tissue-specific recycling compartment. Seminars in Cell and Developmental Biology, 1996, 7, 269-278.	2.3	6
70	The Insulin-like Growth Factor II/Mannose 6-Phosphate Receptor Utilizes the Same Membrane Compartments as GLUT4 for Insulin-dependent Trafficking to and from the Rat Adipocyte Cell Surface. Journal of Biological Chemistry, 1996, 271, 21703-21708.	1.6	54
71	The Expression and Regulation of STATs during 3T3-L1 Adipocyte Differentiation. Journal of Biological Chemistry, 1996, 271, 10441-10444.	1.6	125
72	Glut4 Is Targeted to Specific Vesicles in Adipocytes of Transgenic Mice Overexpressing Glut4 Selectively in Adipose Tissue. Journal of Biological Chemistry, 1996, 271, 10490-10494.	1.6	19

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73	Dynamics of Signaling during Insulin-stimulated Endocytosis of Its Receptor in Adipocytes. Journal of Biological Chemistry, 1995, 270, 59-65.	1.6	118
74	Identification and Characterization of an Exercise-sensitive Pool of Glucose Transporters in Skeletal Muscle. Journal of Biological Chemistry, 1995, 270, 27584-27588.	1.6	165
75	The Metabolic Regulation and Vesicular Transport of GLUT4, the Major Insulin-Responsive Glucose Transporter*. Endocrine Reviews, 1995, 16, 529-546.	8.9	115
76	Intermolecular Phosphorylation between Insulin Holoreceptors Does Not Stimulate Substrate Kinase Activity. Journal of Biological Chemistry, 1995, 270, 31136-31140.	1.6	5
77	Insulin secretion and action and diabetes mellitus. Journal of Cellular Biochemistry, 1992, 48, 1-2.	1.2	6
78	Differential regulation of glucose transporter 1 and 2 mRNA expression by epidermal growth factor and transforming growth factor-beta in rat hepatocytes. Journal of Cellular Physiology, 1992, 153, 288-296.	2.0	25
79	Autophosphorylation within insulin receptor .beta.-subunits can occur as an intramolecular process. Biochemistry, 1991, 30, 7740-7746.	1.2	34
80	Vanadate Treatment of Streptozotocin Diabetic Rats Restores Expression of the Insulin-Responsive Glucose Transporter in Skeletal Muscle. Endocrinology, 1990, 126, 2728-2732.	1.4	79
81	Intrinsic kinase activity of the insulin receptor. International Journal of Biochemistry & Cell Biology, 1990, 22, 315-324.	0.8	28
82	Stimulation of Collagen Formation by Insulin and Insulin-Like Growth Factor I in Cultures of Human Lung Fibroblasts*. Endocrinology, 1989, 124, 964-970.	1.4	218
83	Decreased expression of the insulin-responsive glucose transporter in diabetes and fasting. Nature, 1989, 340, 70-72.	13.7	299
84	Expression of an insulin-regulatable glucose carrier in muscle and fat endothelial cells. Nature, 1989, 342, 798-800.	13.7	47
85	Isolation of a proteolytically derived domain of the insulin receptor containing the major site of cross-linking/binding. Biochemistry, 1989, 28, 3448-3455.	1.2	92
86	Insulin stimulates the tyrosine phosphorylation of a 165 kDa protein that is associated with microsomal membranes of rat adipocytes. Biochimica Et Biophysica Acta - Biomembranes, 1989, 986, 41-46.	1.4	15
87	Insulin binding changes the interface region between .alpha. subunits of the insulin receptor. Biochemistry, 1989, 28, 2722-2727.	1.2	24
88	Insulin-regulatable tissues express a unique insulin-sensitive glucose transport protein. Nature, 1988, 333, 183-185.	13.7	613
89	Insulin-like growth factor I binding and receptor kinase in red and white muscle. FEBS Letters, 1988, 234, 257-262.	1.3	30
90	Separation and characterization of three insulin receptor species that differ in subunit composition. Biochemistry, 1988, 27, 5693-5700.	1.2	25

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91	The ligand binding subunit of the insulin-like growth factor 1 receptor has properties of a peripheral membrane protein. Biochemical and Biophysical Research Communications, 1986, 136, 45-50.	1.0	16
92	Dipeptide metalloendoprotease substrates are glucose transport inhibitors and membrane structure perturbants. Biochemistry, 1986, 25, 3944-3950.	1.2	28
93	Identification of a protein kinase as an intrinsic component of rat liver coated vesicles. Biochemistry, 1984, 23, 4420-4426.	1.2	144
94	Characterization and solubilization of the cytochalasin B binding component from human placental microsomes. Biochimica Et Biophysica Acta - Biomembranes, 1984, 777, 123-132.	1.4	12
95	Stimulation of tyrosine-specific phosphorylation in vitro by insulin-like growth factor I. Nature, 1983, 305, 438-440.	13.7	271
96	The .beta. subunit of the insulin receptor kinase is an insulin-activated protein. Biochemistry, 1983, 22, 717-721.	1.2	227
97	Unique cytochalasin B binding characteristics of the hepatic glucose carrier. Biochemistry, 1983, 22, 2222-2227.	1.2	86
98	Modification of the insulin receptor by diethyl pyrocarbonate: effect on insulin binding and action. Biochemistry, 1982, 21, 5638-5644.	1.2	14
99	Chromatographic resolution of insulin receptor from insulin-sensitive D-glucose transporter of adipocyte plasma membranes. Biochemistry, 1981, 20, 216-221.	1.2	5
100	The insulin receptor: structural features. Trends in Biochemical Sciences, 1981, 6, 222-225.	3.7	73
101	HEXOSE TRANSPORT IN ADIPOCYTES: STIMULATION BY INSULIN IN THE ABSENCE OF INTACT RECEPTOR. Annals of the New York Academy of Sciences, 1980, 358, 356-356.	1.8	0
102	STRUCTURAL FEATURES OF THE INSULIN EFFECTOR SYSTEM: RELATION TO HEXOSE TRANSPORT ACTIVATION. Annals of the New York Academy of Sciences, 1980, 358, 282-291.	1.8	3
103	Effect of Thyroid Status on Insulin Action in Rat Adipocytes and Skeletal Muscle. Journal of Clinical Investigation, 1980, 66, 574-582.	3.9	73
104	Fluorine-containing analogs of intermediates in the shikimate pathway. Biochemistry, 1976, 15, 5315-5320.	1.2	19