Peter Stralfors

List of Publications by Year in descending order

93 papers	8,494 citations	40 h-index	89 g-index
96 all docs	96 docs citations	96 times ranked	14199 citing authors

76294

46771

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy. Autophagy, 2012, 8, 445-544.	4.3	3,122
2	[37] Protein phosphatase-1 and protein phosphatase-2A from rabbit skeletal muscle. Methods in Enzymology, 1988, 159, 390-408.	0.4	417
3	Localization of the insulin receptor in caveolae of adipocyte plasma membrane. FASEB Journal, 1999, 13, 1961-1971.	0.2	332
4	Cholesterol Depletion Disrupts Caveolae and Insulin Receptor Signaling for Metabolic Control via Insulin Receptor Substrate-1, but Not for Mitogen-activated Protein Kinase Control. Journal of Biological Chemistry, 2001, 276, 9670-9678.	1.6	297
5	The protein phosphatases involved in cellular regulation. Purification and characterisation of the glycogen-bound form of protein phosphatase-1 from rabbit skeletal muscle. FEBS Journal, 1985, 149, 295-303.	0.2	250
6	Attenuated mTOR Signaling and Enhanced Autophagy in Adipocytes from Obese Patients with Type 2 Diabetes. Molecular Medicine, 2010, 16, 235-246.	1.9	238
7	Vectorial proteomics reveal targeting, phosphorylation and specific fragmentation of polymerase I and transcript release factor (PTRF) at the surface of caveolae in human adipocytes. Biochemical Journal, 2004, 383, 237-248.	1.7	146
8	Lipids and glycosphingolipids in caveolae and surrounding plasma membrane of primary rat adipocytes. FEBS Journal, 2004, 271, 2028-2036.	0.2	136
9	Insulin-induced dephosphorylation of hormone-sensitive lipase. Correlation with lipolysis and cAMP-dependent protein kinase activity. FEBS Journal, 1989, 182, 379-385.	0.2	126
10	Cell Surface Orifices of Caveolae and Localization of Caveolin to the Necks of Caveolae in Adipocytes. Molecular Biology of the Cell, 2003, 14, 3967-3976.	0.9	126
11	Triacylglycerol Is Synthesized in a Specific Subclass of Caveolae in Primary Adipocytes. Journal of Biological Chemistry, 2005, 280, 5-8.	1.6	122
12	Retinolâ€binding proteinâ€4 attenuates insulinâ€induced phosphorylation of IRS1 and ERK1/2 in primary human adipocytes. FASEB Journal, 2007, 21, 3696-3704.	0.2	120
13	An intracellular glucose biosensor based on nanoflake ZnO. Sensors and Actuators B: Chemical, 2010, 150, 673-680.	4.0	120
14	Functionalised ZnO-nanorod-based selective electrochemical sensor for intracellular glucose. Biosensors and Bioelectronics, 2010, 25, 2205-2211.	5.3	120
15	Direct Evidence that Cholesterol Ester Hydrolase from Adrenal Cortex is the Same Enzyme as Hormone-Sensitive Lipase from Adipose Tissue. FEBS Journal, 1982, 125, 245-249.	0.2	118
16	ZnO nanorods as an intracellular sensor for pH measurements. Journal of Applied Physics, 2007, 102, .	1.1	114
17	Regulation of adipose tissue lipolysis: effects of noradrenaline and insulin on phosphorylation of hormone-sensitive lipase and on lipolysis in intact rat adipocytes. FEBS Letters, 1980, 111, 125-130.	1.3	111
18	Insulin Signaling in Type 2 Diabetes. Journal of Biological Chemistry, 2013, 288, 9867-9880.	1.6	107

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19	Phospho-dephospho-control by insulin is mimicked by a phospho-oligosaccharide in adipocytes. Nature, 1987, 330, 77-79.	13.7	106
20	Insulin-Stimulated Glucose Uptake Involves the Transition of Glucose Transporters to a Caveolae-Rich Fraction within the Plasma Membrane: Implications for Type II Diabetes. Molecular Medicine, 1996, 2, 367-372.	1.9	93
21	Rapid Insulin-Dependent Endocytosis of the Insulin Receptor by Caveolae in Primary Adipocytes. PLoS ONE, 2009, 4, e5985.	1.1	91
22	Colocalization of insulin receptor and insulin receptor substrate-1 to caveolae in primary human adipocytes. Cholesterol depletion blocks insulin signalling for metabolic and mitogenic control. FEBS Journal, 2004, 271, 2471-2479.	0.2	83
23	Insulin induces translocation of glucose transporter GLUT4 to plasma membrane caveolae in adipocytes. FASEB Journal, 2002, 16, 1-12.	0.2	80
24	Insulin stimulation of glucose uptake can be mediated by diacylglycerol in adipocytes. Nature, 1988, 335, 554-556.	13.7	78
25	Mass and Information Feedbacks through Receptor Endocytosis Govern Insulin Signaling as Revealed Using a Parameter-free Modeling Framework. Journal of Biological Chemistry, 2010, 285, 20171-20179.	1.6	78
26	Attenuation of Insulin-stimulated Insulin Receptor Substrate-1 Serine 307 Phosphorylation in Insulin Resistance of Type 2 Diabetes. Journal of Biological Chemistry, 2005, 280, 34389-34392.	1.6	71
27	A Hierarchical Whole-body Modeling Approach Elucidates the Link between in Vitro Insulin Signaling and in Vivo Glucose Homeostasis. Journal of Biological Chemistry, 2011, 286, 26028-26041.	1.6	71
28	Insulin second messengers. BioEssays, 1997, 19, 327-335.	1.2	69
29	[74] Hormone-sensitive lipase from adipose tissue of rat. Methods in Enzymology, 1981, 71 Pt C, 636-646.	0.4	67
30	Insulin resistance in human adipocytes occurs downstream of IRS1 after surgical cell isolation but at the level of phosphorylation of IRS1 in type 2 diabetes. FEBS Journal, 2004, 272, 141-151.	2.2	67
31	Electrophoretic elution of proteins from polyacrylamide gel slices. Analytical Biochemistry, 1983, 128, 7-10.	1.1	59
32	Functionalized zinc oxide nanorod with ionophore-membrane coating as an intracellular Ca2+ selective sensor. Applied Physics Letters, 2009, 95, .	1.5	59
33	PPAR-Î³ response element activity in intact primary human adipocytes: effects of fatty acids. Nutrition, 2006, 22, 60-68.	1.1	54
34	Regulation of adipose tissue lipolysis: phosphorylation of hormone-sensitive lipase in intact rat adipocytes. FEBS Letters, 1980, 111, 120-124.	1.3	49
35	Association and insulin regulated translocation of hormone-sensitive lipase with PTRF. Biochemical and Biophysical Research Communications, 2006, 350, 657-661.	1.0	49
36	A Single Mechanism Can Explain Network-wide Insulin Resistance in Adipocytes from Obese Patients with Type 2 Diabetes. Journal of Biological Chemistry, 2014, 289, 33215-33230.	1.6	49

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37	6 Hormone-Sensitive Lipase. The Enzymes, 1987, , 147-177.	0.7	48
38	Caveolins and Caveolae, Roles in Insulin Signalling and Diabetes. Advances in Experimental Medicine and Biology, 2012, 729, 111-126.	0.8	48
39	Separation and characterization of caveolae subclasses in the plasma membrane of primary adipocytes; segregation of specific proteins and functions. FEBS Journal, 2006, 273, 3381-3392.	2.2	46
40	Differential regulation of adipocyte PDE3B in distinct membrane compartments by insulin and the Î²3-adrenergic receptor agonist CL316243: effects of caveolin-1 knockdown on formation/maintenance of macromolecular signalling complexes. Biochemical Journal, 2009, 424, 399-410.	1.7	40
41	A new role for caveolae as metabolic platforms. Trends in Endocrinology and Metabolism, 2007, 18, 344-349.	3.1	39
42	The Concentration of Î²-Carotene in Human Adipocytes, but Not the Whole-Body Adipocyte Stores, Is Reduced in Obesity. PLoS ONE, 2014, 9, e85610.	1.1	39
43	Global differences in specific histone H3 methylation are associated with overweight and type 2 diabetes. Clinical Epigenetics, 2013, 5, 15.	1.8	38
44	A Miniature Graphene-based Biosensor for Intracellular Glucose Measurements. Electrochimica Acta, 2015, 174, 574-580.	2.6	36
45	Properties and purification of the catalytic subunit of cyclic AMP-dependent protein kinase of adipose tissue. Biochimica Et Biophysica Acta - Molecular Cell Research, 1982, 721, 434-440.	1.9	35
46	Model-Based Hypothesis Testing of Key Mechanisms in Initial Phase of Insulin Signaling. PLoS Computational Biology, 2008, 4, e1000096.	1.5	35
47	Hormonal Control of Reversible Translocation of Perilipin B to the Plasma Membrane in Primary Human Adipocytes. Journal of Biological Chemistry, 2006, 281, 11446-11449.	1.6	33
48	Insulin signaling â€" mathematical modeling comes of age. Trends in Endocrinology and Metabolism, 2012, 23, 107-115.	3.1	32
49	Short-Term Overeating Induces Insulin Resistance in Fat Cells in Lean Human Subjects. Molecular Medicine, 2009, 15, 228-234.	1.9	30
50	Histone Variants and Their Post-Translational Modifications in Primary Human Fat Cells. PLoS ONE, 2011, 6, e15960.	1.1	30
51	Putting the pieces together in diabetes research: Towards a hierarchical model of whole-body glucose homeostasis. European Journal of Pharmaceutical Sciences, 2009, 36, 91-104.	1.9	29
52	Intracellular K$^+$ Determination With a Potentiometric Microelectrode Based on ZnO Nanowires. IEEE Nanotechnology Magazine, 2011, 10, 913-919.	1.1	29
53	Systems-wide Experimental and Modeling Analysis of Insulin Signaling through Forkhead Box Protein O1 (FOXO1) in Human Adipocytes, Normally and in Type 2 Diabetes. Journal of Biological Chemistry, 2016, 291, 15806-15819.	1.6	29
54	Phosphorylation of hormone-sensitive lipase by cyclic GMP-dependent protein kinase. FEBS Letters, 1985, 180, 280-284.	1.3	26

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55	Phosphorylation of the basal site of hormone-sensitive lipase by glycogen synthase kinase-4. FEBS Letters, 1986, 209, 175-180.	1.3	26
56	Insulin and Î²-adrenergic receptors mediate lipolytic and anti-lipolytic signalling that is not altered by type 2 diabetes in human adipocytes. Biochemical Journal, 2019, 476, 2883-2908.	1.7	26
57	Expression of a mutant IRS inhibits metabolic and mitogenic signalling of insulin in human adipocytes. Molecular and Cellular Endocrinology, 2004, 221, 1-8.	1.6	25
58	Differential effects of IGF-I, IGF-II and insulin in human preadipocytes and adipocytes â€“ Role of insulin and IGF-I receptors. Molecular and Cellular Endocrinology, 2011, 339, 130-135.	1.6	25
59	Autolysis of isolated adipocytes by endogenously produced fatty acids. FEBS Letters, 1990, 263, 153-154.	1.3	23
60	Growth and Structure of ZnO Nanorods on a Sub-Micrometer Glass Pipette and Their Application as Intracellular Potentiometric Selective Ion Sensors. Materials, 2010, 3, 4657-4667.	1.3	21
61	Requirements for multi-level systems pharmacology models to reach end-usage: the case of type 2 diabetes. Interface Focus, 2016, 6, 20150075.	1.5	21
62	Inhibition of FOXO1 transcription factor in primary human adipocytes mimics the insulin-resistant state of type 2 diabetes. Biochemical Journal, 2018, 475, 1807-1820.	1.7	19
63	Inhibitors of protein phosphatase-1. Inhibitor-1 of bovine adipose tissue and a dopamine- and cAMP-regulated phosphoprotein of bovine brain are identical. FEBS Journal, 1989, 180, 143-148.	0.2	17
64	Phosphorylation of IRS1 at serine 307 and serine 312 in response to insulin in human adipocytes. Biochemical and Biophysical Research Communications, 2006, 342, 1183-1187.	1.0	17
65	Vectorial Proteomics. IUBMB Life, 2005, 57, 433-440.	1.5	16
66	Subcutaneous adipocytes from obese hyperinsulinemic women with polycystic ovary syndrome exhibit normal insulin sensitivity but reduced maximal insulin responsiveness. European Journal of Endocrinology, 2005, 153, 831-835.	1.9	16
67	Glucose transport is equally sensitive to insulin stimulation, but basal and insulin-stimulated transport is higher, in human omental compared with subcutaneous adipocytes. Metabolism: Clinical and Experimental, 2005, 54, 781-785.	1.5	15
68	Acute effects of insulin on the activity of mitochondrial GPAT1 in primary adipocytes. Biochemical and Biophysical Research Communications, 2008, 367, 201-207.	1.0	15
69	Model-Based Quantification of the Systemic Interplay between Glucose and Fatty Acids in the Postprandial State. PLoS ONE, 2015, 10, e0135665.	1.1	15
70	Direct evidence for protein phosphatase-catalyzed dephosphorylation/ deactivation of hormone-sensitive lipase from adipose tissue. Lipids and Lipid Metabolism, 1984, 794, 488-491.	2.6	14
71	Phosphorylation of IRS1 at Serine 307 in Response to Insulin in Human Adipocytes Is Not Likely to be Catalyzed by p70 Ribosomal S6 Kinase. PLoS ONE, 2013, 8, e59725.	1.1	14
72	Mechanistic explanations for counterâ€intuitive phosphorylation dynamics of the insulin receptor and insulin receptor substrateâ€1 in response to insulin in murine adipocytes. FEBS Journal, 2012, 279, 987-999.	2.2	12

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73	N-terminal processing and modifications of caveolin-1 in caveolae from human adipocytes. Biochemical and Biophysical Research Communications, 2004, 320, 480-486.	1.0	11
74	Human, but not rat, IRS1 targets to the plasma membrane in both human and rat adipocytes. Biochemical and Biophysical Research Communications, 2007, 363, 840-845.	1.0	11
75	Adiponectin is secreted via caveolin 1-dependent mechanisms in white adipocytes. Journal of Endocrinology, 2020, 247, 25-38.	1.2	11
76	Combining test statistics and models in bootstrapped model rejection: it is a balancing act. BMC Systems Biology, 2014, 8, 46.	3.0	10
77	Cross-talks via mTORC2 can explain enhanced activation in response to insulin in diabetic patients. Bioscience Reports, 2017, 37, .	1.1	10
78	Phosphorylation control by insulin in adipocytes is interfered with at a post-receptor step by phosphoinositol and glucosamine. FEBS Letters, 1990, 268, 169-172.	1.3	9
79	Scaffolding protein IQGAP1: an insulin-dependent link between caveolae and the cytoskeleton in primary human adipocytes?. Biochemical Journal, 2016, 473, 3177-3188.	1.7	9
80	Adipose tissue protein phosphatase inhibitor-2. FEBS Journal, 1988, 171, 199-204.	0.2	8
81	Cytoplasmic CREBÎ±-like Antigens in Specific Regions of the Rat Brain. Biochemical and Biophysical Research Communications, 1996, 225, 256-262.	1.0	7
82	Dominant negative inhibition data should be analyzed using mathematical modeling â€“ reâ€interpreting data fromÂinsulin signaling. FEBS Journal, 2015, 282, 788-802.	2.2	6
83	A systems biology analysis of lipolysis and fatty acid release from adipocytes in vitro and from adipose tissue in vivo. PLoS ONE, 2021, 16, e0261681.	1.1	6
84	Chapter 8 Insulin Signaling and Caveolae. Advances in Molecular and Cell Biology, 2005, , 141-169.	0.1	5
85	Synthesis of inositol phosphoglycans containing thiol-terminated spacers for efficient coupling to maleimide functionalized solid phases or proteins. Tetrahedron, 2002, 58, 4245-4254.	1.0	4
86	Translocation of Insulin-Regulated Glucose Transporter Is Stimulated by Long-Chain 1,2-Diacylglycerol in Rat Adipocytes. Experimental Cell Research, 1995, 221, 238-442.	1.2	3
87	Adipocyte-specific ablation of the Ca2+ pump SERCA2 impairs whole-body metabolic function and reveals the diverse metabolic flexibility of white and brown adipose tissue. Molecular Metabolism, 2022, 63, 101535.	3.0	3
88	Hormone-sensitive lipase from swine adipose tissue: Identification and some properties. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1985, 80, 609-612.	0.2	2
89	Uptake and Metabolism of Long-Chain 1,2-Diacylglycerols by Rat Adipocytes and H4IIE Hepatoma Cells. Experimental Cell Research, 1995, 221, 443-447.	1.2	2
90	Multilevel-Modeling, Core Predictions, and the Concept of Final Conclusions. , 2011, , 311-328.		1

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91	Zinc Oxide Nanorods and Their Application to Intracellular Glucose Measurements. , 2012, , 120-140.		1
92	REGULATION OF ADIPOSE TISSUE LIPOLYSIS: PHOSPHORYLATION AND ACTIVATION OF HORMONE-SENSITIVE LIPASE ISOLATED FROM RAT ADIPOSE TISSUE. Biochemical Society Transactions, 1981, 9, 236P-236P.	1.6	0
93	PARTIAL PURIFICATION AND PROPERTIES OF A PROTEIN PHOSPHATASE FROM RAT ADIPOSE TISSUE. Biochemical Society Transactions, 1981, 9, 237P-237P.	1.6	0