

# Peter Stralfors

## List of Publications by Year in descending order

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93  
papers

8,494  
citations

76326

40  
h-index

46799

89  
g-index

96  
all docs

96  
docs citations

96  
times ranked

14199  
citing authors

#	ARTICLE	IF	CITATIONS
1	Guidelines for the use and interpretation of assays for monitoring autophagy. <i>Autophagy</i> , 2012, 8, 445-544.	9.1	3,122
2	[37] Protein phosphatase-1 and protein phosphatase-2A from rabbit skeletal muscle. <i>Methods in Enzymology</i> , 1988, 159, 390-408.	1.0	417
3	Localization of the insulin receptor in caveolae of adipocyte plasma membrane. <i>FASEB Journal</i> , 1999, 13, 1961-1971.	0.5	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. <i>Journal of Biological Chemistry</i> , 2001, 276, 9670-9678.	3.4	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. <i>FEBS Journal</i> , 1985, 149, 295-303.	0.2	250
6	Attenuated mTOR Signaling and Enhanced Autophagy in Adipocytes from Obese Patients with Type 2 Diabetes. <i>Molecular Medicine</i> , 2010, 16, 235-246.	4.4	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. <i>Biochemical Journal</i> , 2004, 383, 237-248.	3.7	146
8	Lipids and glycosphingolipids in caveolae and surrounding plasma membrane of primary rat adipocytes. <i>FEBS Journal</i> , 2004, 271, 2028-2036.	0.2	136
9	Insulin-induced dephosphorylation of hormone-sensitive lipase. Correlation with lipolysis and cAMP-dependent protein kinase activity. <i>FEBS Journal</i> , 1989, 182, 379-385.	0.2	126
10	Cell Surface Orifices of Caveolae and Localization of Caveolin to the Necks of Caveolae in Adipocytes. <i>Molecular Biology of the Cell</i> , 2003, 14, 3967-3976.	2.1	126
11	Triacylglycerol Is Synthesized in a Specific Subclass of Caveolae in Primary Adipocytes. <i>Journal of Biological Chemistry</i> , 2005, 280, 5-8.	3.4	122
12	Retinol-binding protein-4 attenuates insulin-induced phosphorylation of IRS1 and ERK1/2 in primary human adipocytes. <i>FASEB Journal</i> , 2007, 21, 3696-3704.	0.5	120
13	An intracellular glucose biosensor based on nanoflake ZnO. <i>Sensors and Actuators B: Chemical</i> , 2010, 150, 673-680.	7.8	120
14	Functionalised ZnO-nanorod-based selective electrochemical sensor for intracellular glucose. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2205-2211.	10.1	120
15	Direct Evidence that Cholesterol Ester Hydrolase from Adrenal Cortex is the Same Enzyme as Hormone-Sensitive Lipase from Adipose Tissue. <i>FEBS Journal</i> , 1982, 125, 245-249.	0.2	118
16	ZnO nanorods as an intracellular sensor for pH measurements. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	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. <i>FEBS Letters</i> , 1980, 111, 125-130.	2.8	111
18	Insulin Signaling in Type 2 Diabetes. <i>Journal of Biological Chemistry</i> , 2013, 288, 9867-9880.	3.4	107

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19	Phospho-dephospho-control by insulin is mimicked by a phospho-oligosaccharide in adipocytes. <i>Nature</i> , 1987, 330, 77-79.	27.8	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. <i>Molecular Medicine</i> , 1996, 2, 367-372.	4.4	93
21	Rapid Insulin-Dependent Endocytosis of the Insulin Receptor by Caveolae in Primary Adipocytes. <i>PLoS ONE</i> , 2009, 4, e5985.	2.5	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. <i>FEBS Journal</i> , 2004, 271, 2471-2479.	0.2	83
23	Insulin induces translocation of glucose transporter GLUT4 to plasma membrane caveolae in adipocytes. <i>FASEB Journal</i> , 2002, 16, 1-12.	0.5	80
24	Insulin stimulation of glucose uptake can be mediated by diacylglycerol in adipocytes. <i>Nature</i> , 1988, 335, 554-556.	27.8	78
25	Mass and Information Feedbacks through Receptor Endocytosis Govern Insulin Signaling as Revealed Using a Parameter-free Modeling Framework. <i>Journal of Biological Chemistry</i> , 2010, 285, 20171-20179.	3.4	78
26	Attenuation of Insulin-stimulated Insulin Receptor Substrate-1 Serine 307 Phosphorylation in Insulin Resistance of Type 2 Diabetes. <i>Journal of Biological Chemistry</i> , 2005, 280, 34389-34392.	3.4	71
27	A Hierarchical Whole-body Modeling Approach Elucidates the Link between in Vitro Insulin Signaling and in Vivo Glucose Homeostasis. <i>Journal of Biological Chemistry</i> , 2011, 286, 26028-26041.	3.4	71
28	Insulin second messengers. <i>BioEssays</i> , 1997, 19, 327-335.	2.5	69
29	[74] Hormone-sensitive lipase from adipose tissue of rat. <i>Methods in Enzymology</i> , 1981, 71 Pt C, 636-646.	1.0	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. <i>FEBS Journal</i> , 2004, 272, 141-151.	4.7	67
31	Electrophoretic elution of proteins from polyacrylamide gel slices. <i>Analytical Biochemistry</i> , 1983, 128, 7-10.	2.4	59
32	Functionalized zinc oxide nanorod with ionophore-membrane coating as an intracellular Ca <sup>2+</sup> -selective sensor. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	59
33	PPAR- $\delta$ response element activity in intact primary human adipocytes: effects of fatty acids. <i>Nutrition</i> , 2006, 22, 60-68.	2.4	54
34	Regulation of adipose tissue lipolysis: phosphorylation of hormone-sensitive lipase in intact rat adipocytes. <i>FEBS Letters</i> , 1980, 111, 120-124.	2.8	49
35	Association and insulin regulated translocation of hormone-sensitive lipase with PTRF. <i>Biochemical and Biophysical Research Communications</i> , 2006, 350, 657-661.	2.1	49
36	A Single Mechanism Can Explain Network-wide Insulin Resistance in Adipocytes from Obese Patients with Type 2 Diabetes. <i>Journal of Biological Chemistry</i> , 2014, 289, 33215-33230.	3.4	49

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37	6 Hormone-Sensitive Lipase. <i>The Enzymes</i> , 1987, , 147-177.	1.7	48
38	Caveolins and Caveolae, Roles in Insulin Signalling and Diabetes. <i>Advances in Experimental Medicine and Biology</i> , 2012, 729, 111-126.	1.6	48
39	Separation and characterization of caveolae subclasses in the plasma membrane of primary adipocytes; segregation of specific proteins and functions. <i>FEBS Journal</i> , 2006, 273, 3381-3392.	4.7	46
40	Differential regulation of adipocyte PDE3B in distinct membrane compartments by insulin and the $\beta$ -adrenergic receptor agonist CL316243: effects of caveolin-1 knockdown on formation/maintenance of macromolecular signalling complexes. <i>Biochemical Journal</i> , 2009, 424, 399-410.	3.7	40
41	A new role for caveolae as metabolic platforms. <i>Trends in Endocrinology and Metabolism</i> , 2007, 18, 344-349.	7.1	39
42	The Concentration of $\beta$ -Carotene in Human Adipocytes, but Not the Whole-Body Adipocyte Stores, Is Reduced in Obesity. <i>PLoS ONE</i> , 2014, 9, e85610.	2.5	39
43	Global differences in specific histone H3 methylation are associated with overweight and type 2 diabetes. <i>Clinical Epigenetics</i> , 2013, 5, 15.	4.1	38
44	A Miniature Graphene-based Biosensor for Intracellular Glucose Measurements. <i>Electrochimica Acta</i> , 2015, 174, 574-580.	5.2	36
45	Properties and purification of the catalytic subunit of cyclic AMP-dependent protein kinase of adipose tissue. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1982, 721, 434-440.	4.1	35
46	Model-Based Hypothesis Testing of Key Mechanisms in Initial Phase of Insulin Signaling. <i>PLoS Computational Biology</i> , 2008, 4, e1000096.	3.2	35
47	Hormonal Control of Reversible Translocation of Perilipin B to the Plasma Membrane in Primary Human Adipocytes. <i>Journal of Biological Chemistry</i> , 2006, 281, 11446-11449.	3.4	33
48	Insulin signaling – mathematical modeling comes of age. <i>Trends in Endocrinology and Metabolism</i> , 2012, 23, 107-115.	7.1	32
49	Short-Term Overeating Induces Insulin Resistance in Fat Cells in Lean Human Subjects. <i>Molecular Medicine</i> , 2009, 15, 228-234.	4.4	30
50	Histone Variants and Their Post-Translational Modifications in Primary Human Fat Cells. <i>PLoS ONE</i> , 2011, 6, e15960.	2.5	30
51	Putting the pieces together in diabetes research: Towards a hierarchical model of whole-body glucose homeostasis. <i>European Journal of Pharmaceutical Sciences</i> , 2009, 36, 91-104.	4.0	29
52	Intracellular $K^+$ Determination With a Potentiometric Microelectrode Based on ZnO Nanowires. <i>IEEE Nanotechnology Magazine</i> , 2011, 10, 913-919.	2.0	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. <i>Journal of Biological Chemistry</i> , 2016, 291, 15806-15819.	3.4	29
54	Phosphorylation of hormone-sensitive lipase by cyclic GMP-dependent protein kinase. <i>FEBS Letters</i> , 1985, 180, 280-284.	2.8	26

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55	Phosphorylation of the basal site of hormone-sensitive lipase by glycogen synthase kinase-4. <i>FEBS Letters</i> , 1986, 209, 175-180.	2.8	26
56	Insulin and $\beta^2$ -adrenergic receptors mediate lipolytic and anti-lipolytic signalling that is not altered by type 2 diabetes in human adipocytes. <i>Biochemical Journal</i> , 2019, 476, 2883-2908.	3.7	26
57	Expression of a mutant IRS inhibits metabolic and mitogenic signalling of insulin in human adipocytes. <i>Molecular and Cellular Endocrinology</i> , 2004, 221, 1-8.	3.2	25
58	Differential effects of IGF-I, IGF-II and insulin in human preadipocytes and adipocytes – Role of insulin and IGF-I receptors. <i>Molecular and Cellular Endocrinology</i> , 2011, 339, 130-135.	3.2	25
59	Autolysis of isolated adipocytes by endogenously produced fatty acids. <i>FEBS Letters</i> , 1990, 263, 153-154.	2.8	23
60	Growth and Structure of ZnO Nanorods on a Sub-Micrometer Glass Pipette and Their Application as Intracellular Potentiometric Selective Ion Sensors. <i>Materials</i> , 2010, 3, 4657-4667.	2.9	21
61	Requirements for multi-level systems pharmacology models to reach end-usage: the case of type 2 diabetes. <i>Interface Focus</i> , 2016, 6, 20150075.	3.0	21
62	Inhibition of FOXO1 transcription factor in primary human adipocytes mimics the insulin-resistant state of type 2 diabetes. <i>Biochemical Journal</i> , 2018, 475, 1807-1820.	3.7	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. <i>FEBS Journal</i> , 1989, 180, 143-148.	0.2	17
64	Phosphorylation of IRS1 at serine 307 and serine 312 in response to insulin in human adipocytes. <i>Biochemical and Biophysical Research Communications</i> , 2006, 342, 1183-1187.	2.1	17
65	Vectorial Proteomics. <i>IUBMB Life</i> , 2005, 57, 433-440.	3.4	16
66	Subcutaneous adipocytes from obese hyperinsulinemic women with polycystic ovary syndrome exhibit normal insulin sensitivity but reduced maximal insulin responsiveness. <i>European Journal of Endocrinology</i> , 2005, 153, 831-835.	3.7	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. <i>Metabolism: Clinical and Experimental</i> , 2005, 54, 781-785.	3.4	15
68	Acute effects of insulin on the activity of mitochondrial GPAT1 in primary adipocytes. <i>Biochemical and Biophysical Research Communications</i> , 2008, 367, 201-207.	2.1	15
69	Model-Based Quantification of the Systemic Interplay between Glucose and Fatty Acids in the Postprandial State. <i>PLoS ONE</i> , 2015, 10, e0135665.	2.5	15
70	Direct evidence for protein phosphatase-catalyzed dephosphorylation/ deactivation of hormone-sensitive lipase from adipose tissue. <i>Lipids and Lipid Metabolism</i> , 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. <i>PLoS ONE</i> , 2013, 8, e59725.	2.5	14
72	Mechanistic explanations for counterintuitive phosphorylation dynamics of the insulin receptor and insulin receptor substrate – I in response to insulin in murine adipocytes. <i>FEBS Journal</i> , 2012, 279, 987-999.	4.7	12

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73	N-terminal processing and modifications of caveolin-1 in caveolae from human adipocytes. <i>Biochemical and Biophysical Research Communications</i> , 2004, 320, 480-486.	2.1	11
74	Human, but not rat, IRS1 targets to the plasma membrane in both human and rat adipocytes. <i>Biochemical and Biophysical Research Communications</i> , 2007, 363, 840-845.	2.1	11
75	Adiponectin is secreted via caveolin 1-dependent mechanisms in white adipocytes. <i>Journal of Endocrinology</i> , 2020, 247, 25-38.	2.6	11
76	Combining test statistics and models in bootstrapped model rejection: it is a balancing act. <i>BMC Systems Biology</i> , 2014, 8, 46.	3.0	10
77	Cross-talks via mTORC2 can explain enhanced activation in response to insulin in diabetic patients. <i>Bioscience Reports</i> , 2017, 37, .	2.4	10
78	Phosphorylation control by insulin in adipocytes is interfered with at a post-receptor step by phosphoinositol and glucosamine. <i>FEBS Letters</i> , 1990, 268, 169-172.	2.8	9
79	Scaffolding protein IQGAP1: an insulin-dependent link between caveolae and the cytoskeleton in primary human adipocytes?. <i>Biochemical Journal</i> , 2016, 473, 3177-3188.	3.7	9
80	Adipose tissue protein phosphatase inhibitor-2. <i>FEBS Journal</i> , 1988, 171, 199-204.	0.2	8
81	Cytoplasmic CREB $\pm$ -like Antigens in Specific Regions of the Rat Brain. <i>Biochemical and Biophysical Research Communications</i> , 1996, 225, 256-262.	2.1	7
82	Dominant negative inhibition data should be analyzed using mathematical modeling – reinterpreting data from insulin signaling. <i>FEBS Journal</i> , 2015, 282, 788-802.	4.7	6
83	A systems biology analysis of lipolysis and fatty acid release from adipocytes in vitro and from adipose tissue in vivo. <i>PLoS ONE</i> , 2021, 16, e0261681.	2.5	6
84	Chapter 8 Insulin Signaling and Caveolae. <i>Advances in Molecular and Cell Biology</i> , 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. <i>Tetrahedron</i> , 2002, 58, 4245-4254.	1.9	4
86	Translocation of Insulin-Regulated Glucose Transporter Is Stimulated by Long-Chain 1,2-Diacylglycerol in Rat Adipocytes. <i>Experimental Cell Research</i> , 1995, 221, 238-442.	2.6	3
87	Adipocyte-specific ablation of the Ca <sup>2+</sup> pump SERCA2 impairs whole-body metabolic function and reveals the diverse metabolic flexibility of white and brown adipose tissue. <i>Molecular Metabolism</i> , 2022, 63, 101535.	6.5	3
88	Hormone-sensitive lipase from swine adipose tissue: Identification and some properties. <i>Comparative Biochemistry and Physiology Part B: Comparative Biochemistry</i> , 1985, 80, 609-612.	0.2	2
89	Uptake and Metabolism of Long-Chain 1,2-Diacylglycerols by Rat Adipocytes and H4IIE Hepatoma Cells. <i>Experimental Cell Research</i> , 1995, 221, 443-447.	2.6	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.	3.4	0
93	PARTIAL PURIFICATION AND PROPERTIES OF A PROTEIN PHOSPHATASE FROM RAT ADIPOSE TISSUE. Biochemical Society Transactions, 1981, 9, 237P-237P.	3.4	0