Peter Stralfors

List of Publications by Year in Descending Order

93 papers	7,515 citations	38 h-index	86 g-index
96 ext. papers	7,948 ext. citations	5.5 avg, IF	5.11 L-index

#	Paper	IF	Citations
93	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	3.7	1
92	Adiponectin is secreted via caveolin 1-dependent mechanisms in white adipocytes. *Journal of Endocrinology*, **2020**, 247, 25-38	4.7	4
91	Insulin and β-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	3.8	15
90	Inhibition of FOXO1 transcription factor in primary human adipocytes mimics the insulin-resistant state of type 2 diabetes. *Biochemical Journal*, **2018**, 475, 1807-1820	3.8	15
89	Cross-talks via mTORC2 can explain enhanced activation in response to insulin in diabetic patients. *Bioscience Reports*, **2017**, 37,	4.1	9
88	Requirements for multi-level systems pharmacology models to reach end-usage: the case of type 2 diabetes. *Interface Focus*, **2016**, 6, 20150075	3.9	16
87	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, 15806-19	5.4	19
86	Scaffolding protein IQGAP1: an insulin-dependent link between caveolae and the cytoskeleton in primary human adipocytes?. *Biochemical Journal*, **2016**, 473, 3177-88	3.8	7
85	A Miniature Graphene-based Biosensor for Intracellular Glucose Measurements. *Electrochimica Acta* , **2015**, 174, 574-580	6.7	29
84	Model-Based Quantification of the Systemic Interplay between Glucose and Fatty Acids in the Postprandial State. *PLoS ONE*, **2015**, 10, e0135665	3.7	9
83	Dominant negative inhibition data should be analyzed using mathematical modeling--re-interpreting data from insulin signaling. *FEBS Journal*, **2015**, 282, 788-802	5.7	4
82	Combining test statistics and models in bootstrapped model rejection: it is a balancing act. *BMC Systems Biology*, **2014**, 8, 46	3.5	9
81	A single mechanism can explain network-wide insulin resistance in adipocytes from obese patients with type 2 diabetes. *Journal of Biological Chemistry*, **2014**, 289, 33215-30	5.4	36
80	The concentration of β-carotene in human adipocytes, but not the whole-body adipocyte stores, is reduced in obesity. *PLoS ONE*, **2014**, 9, e85610	3.7	31
79	Insulin signaling in type 2 diabetes: experimental and modeling analyses reveal mechanisms of insulin resistance in human adipocytes. *Journal of Biological Chemistry*, **2013**, 288, 9867-9880	5.4	78
78	Global differences in specific histone H3 methylation are associated with overweight and type 2 diabetes. *Clinical Epigenetics*, **2013**, 5, 15	7.7	30
77	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	3.7	12

76	Mechanistic explanations for counter-intuitive phosphorylation dynamics of the insulin receptor and insulin receptor substrate-1 in response to insulin in murine adipocytes. *FEBS Journal*, **2012**, 279, 987-99	5.7	8
75	Insulin signaling - mathematical modeling comes of age. *Trends in Endocrinology and Metabolism*, **2012**, 23, 107-15	8.8	29
74	Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*, **2012**, 8, 445-544	16.2	2783
73	Caveolins and caveolae, roles in insulin signalling and diabetes. *Advances in Experimental Medicine and Biology*, **2012**, 729, 111-26	3.6	37
72	Zinc Oxide Nanorods and Their Application to Intracellular Glucose Measurements **2012**, 120-140		1
71	Multilevel-Modeling, Core Predictions, and the Concept of Final Conclusions **2011**, 311-328		
70	Differential effects of IGF-I, IGF-II and insulin in human preadipocytes and adipocytes--role of insulin and IGF-I receptors. *Molecular and Cellular Endocrinology*, **2011**, 339, 130-5	4.4	24
69	Histone variants and their post-translational modifications in primary human fat cells. *PLoS ONE*, **2011**, 6, e15960	3.7	27
68	Intracellular K$^+$ Determination With a Potentiometric Microelectrode Based on ZnO Nanowires. *IEEE Nanotechnology Magazine*, **2011**, 10, 913-919	2.6	23
67	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, 26028-41	5.4	59
66	Attenuated mTOR signaling and enhanced autophagy in adipocytes from obese patients with type 2 diabetes. *Molecular Medicine*, **2010**, 16, 235-46	6.2	209
65	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	3.5	19
64	Mass and information feedbacks through receptor endocytosis govern insulin signaling as revealed using a parameter-free modeling framework. *Journal of Biological Chemistry*, **2010**, 285, 20171-9	5.4	61
63	An intracellular glucose biosensor based on nanoflake ZnO. *Sensors and Actuators B: Chemical*, **2010** , 150, 673-680	8.5	104
62	Functionalised ZnO-nanorod-based selective electrochemical sensor for intracellular glucose. *Biosensors and Bioelectronics*, **2010**, 25, 2205-11	11.8	108
61	Short-term overeating induces insulin resistance in fat cells in lean human subjects. *Molecular Medicine*, **2009**, 15, 228-34	6.2	25
60	Rapid insulin-dependent endocytosis of the insulin receptor by caveolae in primary adipocytes. *PLoS ONE*, **2009**, 4, e5985	3.7	70
59	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	5.1	23

58	Functionalized zinc oxide nanorod with ionophore-membrane coating as an intracellular Ca2+ selective sensor. *Applied Physics Letters*, **2009**, 95, 023703	3.4	49
57	Differential regulation of adipocyte PDE3B in distinct membrane compartments by insulin and the beta3-adrenergic receptor agonist CL316243: effects of caveolin-1 knockdown on formation/maintenance of macromolecular signalling complexes. *Biochemical Journal*, **2009**, 424, 399-410	3.8	37
56	Acute effects of insulin on the activity of mitochondrial GPAT1 in primary adipocytes. *Biochemical and Biophysical Research Communications*, **2008**, 367, 201-7	3.4	15
55	Model-based hypothesis testing of key mechanisms in initial phase of insulin signaling. *PLoS Computational Biology*, **2008**, 4, e1000096	5	32
54	Retinol-binding protein-4 attenuates insulin-induced phosphorylation of IRS1 and ERK1/2 in primary human adipocytes. *FASEB Journal*, **2007**, 21, 3696-704	0.9	106
53	A new role for caveolae as metabolic platforms. *Trends in Endocrinology and Metabolism*, **2007**, 18, 344-9	8.8	38
52	Human, but not rat, IRS1 targets to the plasma membrane in both human and rat adipocytes. *Biochemical and Biophysical Research Communications*, **2007**, 363, 840-5	3.4	10
51	ZnO nanorods as an intracellular sensor for pH measurements. *Journal of Applied Physics*, **2007**, 102, 084304	2.5	101
50	PPAR-gamma response element activity in intact primary human adipocytes: effects of fatty acids. *Nutrition*, **2006**, 22, 60-8	4.8	52
49	Hormonal control of reversible translocation of perilipin B to the plasma membrane in primary human adipocytes. *Journal of Biological Chemistry*, **2006**, 281, 11446-9	5.4	31
48	Phosphorylation of IRS1 at serine 307 and serine 312 in response to insulin in human adipocytes. *Biochemical and Biophysical Research Communications*, **2006**, 342, 1183-7	3.4	16
47	Association and insulin regulated translocation of hormone-sensitive lipase with PTRF. *Biochemical and Biophysical Research Communications*, **2006**, 350, 657-61	3.4	44
46	Separation and characterization of caveolae subclasses in the plasma membrane of primary adipocytes; segregation of specific proteins and functions. *FEBS Journal*, **2006**, 273, 3381-92	5.7	45
45	Chapter 8 Insulin Signaling and Caveolae. *Advances in Molecular and Cell Biology*, **2005**, 141-169		4
44	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, 781-5	12.7	14
43	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*, **2005**, 272, 141-51	5.7	61
42	Vectorial proteomics. *IUBMB Life*, **2005**, 57, 433-40	4.7	12
41	Attenuation of insulin-stimulated insulin receptor substrate-1 serine 307 phosphorylation in insulin resistance of type 2 diabetes. *Journal of Biological Chemistry*, **2005**, 280, 34389-92	5.4	63

40	Triacylglycerol is synthesized in a specific subclass of caveolae in primary adipocytes. *Journal of Biological Chemistry*, **2005**, 280, 5-8	5.4	110
39	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, 831-5	6.5	13
38	Lipids and glycosphingolipids in caveolae and surrounding plasma membrane of primary rat adipocytes. *FEBS Journal*, **2004**, 271, 2028-36		112
37	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, 2471-9		72
36	N-terminal processing and modifications of caveolin-1 in caveolae from human adipocytes. *Biochemical and Biophysical Research Communications*, **2004**, 320, 480-6	3.4	9
35	Expression of a mutant IRS inhibits metabolic and mitogenic signalling of insulin in human adipocytes. *Molecular and Cellular Endocrinology*, **2004**, 221, 1-8	4.4	21
34	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, 237-48	3.8	133
33	Cell surface orifices of caveolae and localization of caveolin to the necks of caveolae in adipocytes. *Molecular Biology of the Cell*, **2003**, 14, 3967-76	3.5	111
32	Synthesis of inositol phosphoglycans containing thiol-terminated spacers for efficient coupling to maleimide functionalized solid phases or proteins. *Tetrahedron*, **2002**, 58, 4245-4254	2.4	4
31	Insulin induces translocation of glucose transporter GLUT4 to plasma membrane caveolae in adipocytes. *FASEB Journal*, **2002**, 16, 249-51	0.9	73
30	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, 9670-8	5.4	268
29	Localization of the insulin receptor in caveolae of adipocyte plasma membrane. *FASEB Journal*, **1999**, 13, 1961-1971	0.9	312
28	Insulin second messengers. *BioEssays*, **1997**, 19, 327-35	4.1	56
27	Cytoplasmic CREB alpha-like antigens in specific regions of the rat brain. *Biochemical and Biophysical Research Communications*, **1996**, 225, 256-62	3.4	6
26	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	6.2	88
25	Translocation of Insulin-Regulated Glucose Transporter Is Stimulated by Long-Chain 1,2-Diacylglycerol in Rat Adipocytes. *Experimental Cell Research*, **1995**, 221, 238-442	4.2	2
24	Uptake and metabolism of long-chain 1,2-diacylglycerols by rat adipocytes and H4IIE hepatoma cells. *Experimental Cell Research*, **1995**, 221, 443-7	4.2	2
23	Autolysis of isolated adipocytes by endogenously produced fatty acids. *FEBS Letters*, **1990**, 263, 153-4	3.8	21

22	Phosphorylation control by insulin in adipocytes is interfered with at a post-receptor step by phosphoinositol and glucosamine. *FEBS Letters*, **1990**, 268, 169-72	3.8	9
21	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, 143-8		16
20	Insulin-induced dephosphorylation of hormone-sensitive lipase. Correlation with lipolysis and cAMP-dependent protein kinase activity. *FEBS Journal*, **1989**, 182, 379-85		112
19	Adipose tissue protein phosphatase inhibitor-2. *FEBS Journal*, **1988**, 171, 199-204		8
18	Insulin stimulation of glucose uptake can be mediated by diacylglycerol in adipocytes. *Nature*, **1988**, 335, 554-6	50.4	75
17	Protein phosphatase-1 and protein phosphatase-2A from rabbit skeletal muscle. *Methods in Enzymology*, **1988**, 159, 390-408	1.7	373
16	6 Hormone-Sensitive Lipase. *The Enzymes*, **1987**, 147-177	2.3	40
15	Phospho-dephospho-control by insulin is mimicked by a phospho-oligosaccharide in adipocytes. *Nature*, **1987**, 330, 77-9	50.4	101
14	Phosphorylation of the basal site of hormone-sensitive lipase by glycogen synthase kinase-4. *FEBS Letters*, **1986**, 209, 175-80	3.8	23
13	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		236
12	Hormone-sensitive lipase from swine adipose tissue: identification and some properties. *Comparative Biochemistry and Physiology Part B: Comparative Biochemistry*, **1985**, 80, 609-12		1
11	Phosphorylation of hormone-sensitive lipase by cyclic GMP-dependent protein kinase. *FEBS Letters*, **1985**, 180, 280-4	3.8	24
10	Direct evidence for protein phosphatase-catalyzed dephosphorylation/deactivation of hormone-sensitive lipase from adipose tissue. *Lipids and Lipid Metabolism*, **1984**, 794, 488-91		14
9	Electrophoretic elution of proteins from polyacrylamide gel slices. *Analytical Biochemistry*, **1983**, 128, 7-10	3.1	56
8	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, 434-40	4.9	35
7	Direct evidence that cholesterol ester hydrolase from adrenal cortex is the same enzyme as hormone-sensitive lipase from adipose tissue. *FEBS Journal*, **1982**, 125, 245-9		102
6	REGULATION OF ADIPOSE TISSUE LIPOLYSIS: PHOSPHORYLATION AND ACTIVATION OF HORMONE-SENSITIVE LIPASE ISOLATED FROM RAT ADIPOSE TISSUE. *Biochemical Society Transactions*, **1981**, 9, 236P-236P	5.1	
5	PARTIAL PURIFICATION AND PROPERTIES OF A PROTEIN PHOSPHATASE FROM RAT ADIPOSE TISSUE. *Biochemical Society Transactions*, **1981**, 9, 237P-237P	5.1	

4	Hormone-sensitive lipase from adipose tissue of rat. *Methods in Enzymology*, **1981**, 71 Pt C, 636-46	1.7	62
3	Regulation of adipose tissue lipolysis: phosphorylation of hormones sensitive lipase in intact rat adipocytes. *FEBS Letters*, **1980**, 111, 120-4	3.8	45
2	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, 125-30	3.8	106
1	Core-Box Modeling in the Biosimulation of Drug Action115-139		