Mikael RydÃ©n

List of Publications by Year
in descending order

135 papers	10,501 citations	38660 50 h-index	34900 98 g-index
144 all docs	144 docs citations	144 times ranked	13397 citing authors

#	Article	IF	Citations
1	Dynamics of fat cell turnover in humans. Nature, 2008, 453, 783-787.	13.7	1,914
2	Dipeptidyl Peptidase 4 Is a Novel Adipokine Potentially Linking Obesity to the Metabolic Syndrome. Diabetes, 2011, 60, 1917-1925.	0.3	506
3	Adipocyte Turnover: Relevance to Human Adipose Tissue Morphology. Diabetes, 2010, 59, 105-109.	0.3	490
4	Adipocyte Lipases and Defect of Lipolysis in Human Obesity. Diabetes, 2005, 54, 3190-3197.	0.3	329
5	Dynamics of human adipose lipid turnover in health and metabolic disease. Nature, 2011, 478, 110-113.	13.7	319
6	Functional studies of mesenchymal stem cells derived from adult human adipose tissue. Experimental Cell Research, 2005, 308, 283-290.	1.2	279
7	Adipose Tissue MicroRNAs as Regulators of CCL2 Production in Human Obesity. Diabetes, 2012, 61, 1986-1993.	0.3	263
8	Mechanism of Increased Lipolysis in Cancer Cachexia. Cancer Research, 2007, 67, 5531-5537.	0.4	239
9	Mapping of Early Signaling Events in Tumor Necrosis Factor-Î±-mediated Lipolysis in Human Fat Cells. Journal of Biological Chemistry, 2002, 277, 1085-1091.	1.6	213
10	Regional impact of adipose tissue morphology on the metabolic profile in morbid obesity. Diabetologia, 2010, 53, 2496-2503.	2.9	190
11	Contribution of Adipose Triglyceride Lipase and Hormone-sensitive Lipase to Lipolysis in hMADS Adipocytes. Journal of Biological Chemistry, 2009, 284, 18282-18291.	1.6	177
12	Targets for TNF-Î±-induced lipolysis in human adipocytes. Biochemical and Biophysical Research Communications, 2004, 318, 168-175.	1.0	165
13	Increased fat cell size: a major phenotype of subcutaneous white adipose tissue in non-obese individuals with type 2 diabetes. Diabetologia, 2016, 59, 560-570.	2.9	163
14	Effect of testosterone on lipolysis in human pre-adipocytes from different fat depots. Diabetologia, 2004, 47, 420-428.	2.9	140
15	Lipolysisâ€"Not inflammation, cell death, or lipogenesisâ€"Is involved in adipose tissue loss in cancer cachexia. Cancer, 2008, 113, 1695-1704.	2.0	140
16	Fatty Acids, Obesity and Insulin Resistance. Obesity Facts, 2015, 8, 147-155.	1.6	139
17	Characterization of the Wnt Inhibitors Secreted Frizzled-Related Proteins (SFRPs) in Human Adipose Tissue. Journal of Clinical Endocrinology and Metabolism, 2013, 98, E503-E508.	1.8	130
18	Glutamine Links Obesity to Inflammation in Human White Adipose Tissue. Cell Metabolism, 2020, 31, 375-390.e11.	7.2	128

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19	Functional characterization of human mesenchymal stem cell-derived adipocytes. Biochemical and Biophysical Research Communications, 2003, 311, 391-397.	1.0	119
20	Comparative studies of the role of hormone-sensitive lipase and adipose triglyceride lipase in human fat cell lipolysis. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1847-E1855.	1.8	110
21	Regulation of Lipolysis in Small and Large Fat Cells of the Same Subject. Journal of Clinical Endocrinology and Metabolism, 2011, 96, E2045-E2049.	1.8	110
22	Hyperglycemia Induces Trained Immunity in Macrophages and Their Precursors and Promotes Atherosclerosis. Circulation, 2021, 144, 961-982.	1.6	109
23	An AMP-activated protein kinaseâ€“stabilizing peptide ameliorates adipose tissue wasting in cancer cachexia in mice. Nature Medicine, 2016, 22, 1120-1130.	15.2	106
24	Tumour necrosis factor-? in human adipose tissue ? from signalling mechanisms to clinical implications. Journal of Internal Medicine, 2007, 262, 431-438.	2.7	99
25	Weight Gain and Impaired Glucose Metabolism in Women Are Predicted by Inefficient Subcutaneous Fat Cell Lipolysis. Cell Metabolism, 2018, 28, 45-54.e3.	7.2	95
26	Spatial mapping reveals human adipocyte subpopulations with distinct sensitivities to insulin. Cell Metabolism, 2021, 33, 1869-1882.e6.	7.2	92
27	Adipose Tissue and Metabolic Alterations: Regional Differences in Fat Cell Size and Number Matter, But Differently: A Cross-Sectional Study. Journal of Clinical Endocrinology and Metabolism, 2014, 99, E1870-E1876.	1.8	90
28	Early B Cell Factor 1 Regulates Adipocyte Morphology and Lipolysis in White Adipose Tissue. Cell Metabolism, 2014, 19, 981-992.	7.2	90
29	Adipose lipid turnover and long-term changes in body weight. Nature Medicine, 2019, 25, 1385-1389.	15.2	90
30	The fat cell epigenetic signature in post-obese women is characterized by global hypomethylation and differential DNA methylation of adipogenesis genes. International Journal of Obesity, 2015, 39, 910-919.	1.6	85
31	Changes in Subcutaneous Fat Cell Volume and Insulin Sensitivity After Weight Loss. Diabetes Care, 2014, 37, 1831-1836.	4.3	84
32	MicroRNAs Regulate Human Adipocyte Lipolysis: Effects of miR-145 Are Linked to TNF-Î±. PLoS ONE, 2014, 9, e86800.	1.1	84
33	Cidea improves the metabolic profile through expansion of adipose tissue. Nature Communications, 2015, 6, 7433.	5.8	80
34	Vascular Peptide Endothelin-1 Links Fat Accumulation With Alterations of Visceral Adipocyte Lipolysis. Diabetes, 2008, 57, 378-386.	0.3	77
35	CD36 Is a Marker of Human Adipocyte Progenitors with Pronounced Adipogenic and Triglyceride Accumulation Potential. Stem Cells, 2017, 35, 1799-1814.	1.4	76
36	Transplanted Bone Marrow-Derived Cells Contribute to Human Adipogenesis. Cell Metabolism, 2015, 22, 408-417.	7.2	75

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37	Fat loss in cachexiaâ€”is there a role for adipocyte lipolysis?. Clinical Nutrition, 2007, 26, 1-6.	2.3	72
38	Liver macrophages regulate systemic metabolism through non-inflammatory factors. Nature Metabolism, 2019, 1, 445-459.	5.1	72
39	Impact of fat mass and distribution on lipid turnover in human adipose tissue. Nature Communications, 2017, 8, 15253.	5.8	71
40	Transforming Growth Factor-Î²3 Regulates Adipocyte Number in Subcutaneous White Adipose Tissue. Cell Reports, 2018, 25, 551-560.e5.	2.9	68
41	Lipolysis drives expression of the constitutively active receptor GPR3 to induce adipose thermogenesis. Cell, 2021, 184, 3502-3518.e33.	13.5	68
42	In vitro and ex vivo models of adipocytes. American Journal of Physiology - Cell Physiology, 2021, 320, C822-C841.	2.1	65
43	Long-term Protective Changes in Adipose Tissue After Gastric Bypass. Diabetes Care, 2017, 40, 77-84.	4.3	64
44	Effect of the (C825T) GÂ3 Polymorphism on Adrenoceptor-Mediated Lipolysis in Human Fat Cells. Diabetes, 2002, 51, 1601-1608.	0.3	63
45	The epigenetic signature of systemic insulin resistance in obese women. Diabetologia, 2016, 59, 2393-2405.	2.9	62
46	Subcutaneous Adipocyte Lipolysis Contributes to Circulating Lipid Levels. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 1782-1787.	1.1	61
47	Long Non-Coding RNAs Associated with Metabolic Traits in Human White Adipose Tissue. EBioMedicine, 2018, 30, 248-260.	2.7	61
48	Adipose tissue morphology predicts improved insulin sensitivity following moderate or pronounced weight loss. International Journal of Obesity, 2015, 39, 893-898.	1.6	57
49	Adipocyte triglyceride turnover and lipolysis in lean and overweight subjects. Journal of Lipid Research, 2013, 54, 2909-2913.	2.0	55
50	The epigenetic signature of subcutaneous fat cells is linked to altered expression of genes implicated in lipid metabolism in obese women. Clinical Epigenetics, 2015, 7, 93.	1.8	54
51	Single cell transcriptomics suggest that human adipocyte progenitor cells constitute a homogeneous cell population. Stem Cell Research and Therapy, 2017, 8, 250.	2.4	53
52	Impaired atrial natriuretic peptide-mediated lipolysis in obesity. International Journal of Obesity, 2016, 40, 714-720.	1.6	52
53	MicroRNA-193b Controls Adiponectin Production in Human White Adipose Tissue. Journal of Clinical Endocrinology and Metabolism, 2015, 100, E1084-E1088.	1.8	51
54	Ceruloplasmin Is a Novel Adipokine Which Is Overexpressed in Adipose Tissue of Obese Subjects and in Obesity-Associated Cancer Cells. PLoS ONE, 2014, 9, e80274.	1.1	50

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55	Numerous Genes in Loci Associated With Body Fat Distribution Are Linked to Adipose Function. Diabetes, 2016, 65, 433-437.	0.3	50
56	Tumor Necrosis Factor Î± and Regulation of Adipose Tissue. New England Journal of Medicine, 2010, 362, 1151-1153.	13.9	48
57	Disrupted circadian oscillations in type 2 diabetes are linked to altered rhythmic mitochondrial metabolism in skeletal muscle. Science Advances, 2021, 7, eabi9654.	4.7	44
58	Activation of Liver X Receptor Regulates Substrate Oxidation in White Adipocytes. Endocrinology, 2009, 150, 4104-4113.	1.4	43
59	Liver macrophages inhibit the endogenous antioxidant response in obesity-associated insulin resistance. Science Translational Medicine, 2020, 12, .	5.8	43
60	Thioredoxin reductase 1 suppresses adipocyte differentiation and insulin responsiveness. Scientific Reports, 2016, 6, 28080.	1.6	42
61	Interaction between hormone-sensitive lipase and ChREBP in fat cells controls insulin sensitivity. Nature Metabolism, 2019, 1, 133-146.	5.1	42
62	Age-Induced Reduction in Human Lipolysis: A Potential Role for Adipocyte Noradrenaline Degradation. Cell Metabolism, 2020, 32, 1-3.	7.2	42
63	Î²3-Adrenergic receptor downregulation leads to adipocyte catecholamine resistance in obesity. Journal of Clinical Investigation, 2022, 132, .	3.9	42
64	Fibroblast growth factor 21: an overview from a clinical perspective. Cellular and Molecular Life Sciences, 2009, 66, 2067-2073.	2.4	39
65	Cellular senescence and its role in white adipose tissue. International Journal of Obesity, 2021, 45, 934-943.	1.6	38
66	Increased expression of eNOS protein in omental versus subcutaneous adipose tissue in obese human subjects. International Journal of Obesity, 2001, 25, 811-815.	1.6	37
67	Effects of obesity and weight loss on the expression of proteins involved in fatty acid metabolism in human adipose tissue. International Journal of Obesity, 2002, 26, 1379-1385.	1.6	37
68	3D Adipose Tissue Culture Links the Organotypic Microenvironment to Improved Adipogenesis. Advanced Science, 2021, 8, e2100106.	5.6	37
69	Glycogen metabolism links glucose homeostasis to thermogenesis in adipocytes. Nature, 2021, 599, 296-301.	13.7	36
70	<i>MFAP5</i>is related to obesity-associated adipose tissue and extracellular matrix remodeling and inflammation. Obesity, 2015, 23, 1371-1378.	1.5	35
71	The Adipose Transcriptional Response to Insulin Is Determined by Obesity, Not Insulin Sensitivity. Cell Reports, 2016, 16, 2317-2326.	2.9	35
72	Hepatic miR-144 Drives Fumarase Activity Preventing NRF2 Activation During Obesity. Gastroenterology, 2021, 161, 1982-1997.e11.	0.6	34

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73	Natriuretic peptides promote glucose uptake in a cGMP-dependent manner in human adipocytes. Scientific Reports, 2018, 8, 1097.	1.6	33
74	The Arg 389 Gly Î²1-adrenergic receptor gene polymorphism and human fat cell lipolysis. International Journal of Obesity, 2001, 25, 1599-1603.	1.6	32
75	Adipose and Circulating CCL18 Levels Associate With Metabolic Risk Factors in Women. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 4021-4029.	1.8	32
76	Transgenerational Epigenetic Mechanisms in Adipose Tissue Development. Trends in Endocrinology and Metabolism, 2018, 29, 675-685.	3.1	32
77	Human-Specific Function of IL-10 in Adipose Tissue Linked to Insulin Resistance. Journal of Clinical Endocrinology and Metabolism, 2019, 104, 4552-4562.	1.8	32
78	Adipose zincâ€Î±2â€glycoprotein is a catabolic marker in cancer and noncancerous states. Journal of Internal Medicine, 2012, 271, 414-420.	2.7	30
79	Abdominal subcutaneous adipose tissue cellularity in men and women. International Journal of Obesity, 2017, 41, 1564-1569.	1.6	30
80	Adipocyte Expression of SLC19A1 Links DNA Hypermethylation to Adipose Tissue Inflammation and Insulin Resistance. Journal of Clinical Endocrinology and Metabolism, 2018, 103, 710-721.	1.8	29
81	Specific loss of adipocyte CD248 improves metabolic health via reduced white adipose tissue hypoxia, fibrosis and inflammation. EBioMedicine, 2019, 44, 489-501.	2.7	29
82	Regional variations in the relationship between arterial stiffness and adipocyte volume or number in obese subjects. International Journal of Obesity, 2015, 39, 222-227.	1.6	28
83	Cardiovascular risk score is linked to subcutaneous adipocyte size and lipid metabolism. Journal of Internal Medicine, 2017, 282, 220-228.	2.7	28
84	Transcriptional Dynamics During Human Adipogenesis and Its Link to Adipose Morphology and Distribution. Diabetes, 2017, 66, 218-230.	0.3	27
85	Open Randomized Multicenter Study to Evaluate Safety and Efficacy of Low Molecular Weight Sulfated Dextran in Islet Transplantation. Transplantation, 2019, 103, 630-637.	0.5	27
86	Omentectomy in Addition to Bariatric Surgeryâ€"a 5-Year Follow-up. Obesity Surgery, 2017, 27, 1115-1118.	1.1	26
87	Depot-specific differences in fatty acid composition and distinct associations with lipogenic gene expression in abdominal adipose tissue of obese women. International Journal of Obesity, 2017, 41, 1295-1298.	1.6	26
88	Human white adipose tissue: A highly dynamic metabolic organ. Journal of Internal Medicine, 2022, 291, 611-621.	2.7	26
89	Circulating Carnosine Dipeptidase 1 Associates with Weight Loss and Poor Prognosis in Gastrointestinal Cancer. PLoS ONE, 2015, 10, e0123566.	1.1	25
90	FAM13A and POM121C are candidate genes for fasting insulin: functional follow-up analysis of a genome-wide association study. Diabetologia, 2018, 61, 1112-1123.	2.9	24

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91	Screening of potential adipokines identifies S100A4 as a marker of pernicious adipose tissue and insulin resistance. International Journal of Obesity, 2018, 42, 2047-2056.	1.6	24
92	Saturated fatty acids in human visceral adipose tissue are associated with increased 11-Î²-hydroxysteroid-dehydrogenase type 1 expression. Lipids in Health and Disease, 2015, 14, 42.	1.2	23
93	The imprinted gene Delta like non-canonical notch ligand 1 (Dlk1) associates with obesity and triggers insulin resistance through inhibition of skeletal muscle glucose uptake. EBioMedicine, 2019, 46, 368-380.	2.7	23
94	The Lipid Droplet Knowledge Portal: A resource for systematic analyses of lipid droplet biology. Developmental Cell, 2022, 57, 387-397.e4.	3.1	22
95	Effects of selected bioactive food compounds on human white adipocyte function. Nutrition and Metabolism, 2016, 13, 4.	1.3	21
96	Insulin action is severely impaired in adipocytes of apparently healthy overweight and obese subjects. Journal of Internal Medicine, 2019, 285, 578-588.	2.7	21
97	Role of the Neutral Amino Acid Transporter SLC7A10 in Adipocyte Lipid Storage, Obesity, and Insulin Resistance. Diabetes, 2021, 70, 680-695.	0.3	21
98	Impaired phosphocreatine metabolism in white adipocytes promotes inflammation. Nature Metabolism, 2022, 4, 190-202.	5.1	21
99	Longâ€term changes in adipose tissue gene expression following bariatric surgery. Journal of Internal Medicine, 2020, 288, 219-233.	2.7	20
100	Role of Receptor-Interacting Protein 140 in human fat cells. BMC Endocrine Disorders, 2010, 10, 1.	0.9	19
101	Circulating and Adipose Levels of Adipokines Associated With Insulin Sensitivity in Nonobese Subjects With Type 2 Diabetes. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 3765-3771.	1.8	18
102	MicroRNAs-361-5p and miR-574-5p associate with human adipose morphology and regulate EBF1 expression in white adipose tissue. Molecular and Cellular Endocrinology, 2018, 472, 50-56.	1.6	18
103	Improved metabolism and body composition beyond normal levels following gastric bypass surgery: a longitudinal study. Journal of Internal Medicine, 2019, 285, 92-101.	2.7	18
104	Family history of diabetes is associated with enhanced adipose lipolysis: Evidence for the implication of epigenetic factors. Diabetes and Metabolism, 2018, 44, 155-159.	1.4	16
105	Human White Adipose Tissue Displays Selective Insulin Resistance in the Obese State. Diabetes, 2021, 70, 1486-1497.	0.3	16
106	OBEDIS Core Variables Project: European Expert Guidelines on a Minimal Core Set of Variables to Include in Randomized, Controlled Clinical Trials of Obesity Interventions. Obesity Facts, 2020, 13, 1-28.	1.6	15
107	The Rho GTPase RND3 regulates adipocyte lipolysis. Metabolism: Clinical and Experimental, 2019, 101, 153999.	1.5	14
108	Glutamine Regulates Skeletal Muscle Immunometabolism in Type 2 Diabetes. Diabetes, 2022, 71, 624-636.	0.3	14

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109	Body fat mass and distribution as predictors of metabolic outcome and weight loss after Roux-en-Y gastric bypass. Surgery for Obesity and Related Diseases, 2018, 14, 936-942.	1.0	13
110	Usefulness of surrogate markers to determine insulin action in fat cells. International Journal of Obesity, 2020, 44, 2436-2443.	1.6	13
111	Differential Mitochondrial Gene Expression in Adipose Tissue Following Weight Loss Induced by Diet or Bariatric Surgery. Journal of Clinical Endocrinology and Metabolism, 2021, 106, 1312-1324.	1.8	13
112	Diabetes and Metabolic Drivers of Trained Immunity. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 1284-1290.	1.1	13
113	Long-Term Improvement in Aortic Pulse Wave Velocity After Weight Loss Can Be Predicted by White Adipose Tissue Factors. American Journal of Hypertension, 2018, 31, 450-457.	1.0	12
114	Mapping of biguanide transporters in human fat cells and their impact on lipolysis. Diabetes, Obesity and Metabolism, 2018, 20, 2416-2425.	2.2	12
115	Influence of Aging and Menstrual Status on Subcutaneous Fat Cell Lipolysis. Journal of Clinical Endocrinology and Metabolism, 2020, 105, e955-e962.	1.8	12
116	Circadian Rhythms in Hormone-sensitive Lipase in Human Adipose Tissue: Relationship to Meal Timing and Fasting Duration. Journal of Clinical Endocrinology and Metabolism, 2020, 105, e4407-e4416.	1.8	12
117	The contribution of bone marrow-derived cells to the human adipocyte pool. Adipocyte, 2017, 6, 187-192.	1.3	11
118	Repin1 deficiency in adipose tissue improves whole-body insulin sensitivity, and lipid metabolism. International Journal of Obesity, 2017, 41, 1815-1823.	1.6	11
119	Transforming growth factor Î²3 deficiency promotes defective lipid metabolism and fibrosis in murine kidney. DMM Disease Models and Mechanisms, 2021, 14, .	1.2	11
120	Impaired mRNA splicing and proteostasis in preadipocytes in obesity-related metabolic disease. ELife, 2021, 10, .	2.8	10
121	Prospective analyses of white adipose tissue gene expression in relation to long-term body weight changes. International Journal of Obesity, 2020, 44, 377-387.	1.6	9
122	Metabolic Impact of Body Fat Percentage Independent of Body Mass Index in Women with Obesity Remission After Gastric Bypass. Obesity Surgery, 2020, 30, 1086-1092.	1.1	9
123	Glutamine metabolism in adipocytes: a bona fide epigenetic modulator of inflammation. Adipocyte, 2020, 9, 620-625.	1.3	9
124	Novel aspects on the role of white adipose tissue in type 2 diabetes. Current Opinion in Pharmacology, 2020, 55, 47-52.	1.7	8
125	<i>Soat2</i> ties cholesterol metabolism to Î²â€oxidation and glucose tolerance in male mice. Journal of Internal Medicine, 2022, 292, 296-307.	2.7	6
126	Quantitative phosphoproteomic analysis of IRS1 in skeletal muscle from men with normal glucose tolerance or type 2 diabetes: A case-control study. Metabolism: Clinical and Experimental, 2021, 118, 154726.	1.5	5

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127	Ex vivo Analysis of Lipolysis in Human Subcutaneous Adipose Tissue Explants. Bio-protocol, 2018, 8, e2711.	0.2	5
128	Low early B-cell factor 1 (EBF1) activity in human subcutaneous adipose tissue is linked to a pernicious metabolic profile. Diabetes and Metabolism, 2015, 41, 509-512.	1.4	4
129	A longitudinal study of the antilipolytic effect of insulin in women following bariatric surgery. International Journal of Obesity, 2021, 45, 2675-2678.	1.6	4
130	On the origin of human adipocytes and the contribution of bone marrow-derived cells. Adipocyte, 2016, 5, 312-317.	1.3	3
131	Understanding the complexity of insulin resistance. Nature Reviews Endocrinology, 2022, , .	4.3	3
132	Lipolysis defect in people with obesity who undergo metabolic surgery. Journal of Internal Medicine, 2022, 292, 667-678.	2.7	3
133	Bariatric surgery helps to reduce blood pressure - insights from GATEWAY trial. Cardiovascular Research, 2018, 114, e19-e21.	1.8	1
134	Subcutaneous adipose tissue expansion mechanisms are similar in early and late onset overweight/obesity. International Journal of Obesity, 2022, 46, 1196-1203.	1.6	1
135	Insights from Studies of White Adipose Tissue Using Single-Cell Approaches. Handbook of Experimental Pharmacology, 2022, , 1.	0.9	0