Antti Hakkarainen

List of Publications by Year
in descending order

109	6,318	57631	74018
papers	citations	44 h-index	75 g-index

112	112	112	10153
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prediction of Non-Alcoholic Fatty Liver Disease and Liver Fat Using Metabolic and Genetic Factors. Gastroenterology, 2009, 137, 865-872.	0.6	646
2	An Integrated Understanding of the Rapid Metabolic Benefits of a Carbohydrate-Restricted Diet on Hepatic Steatosis in Humans. Cell Metabolism, 2018, 27, 559-571.e5.	7.2	321
3	Saturated Fat Is More Metabolically Harmful for the Human Liver Than Unsaturated Fat or Simple Sugars. Diabetes Care, 2018, 41, 1732-1739.	4.3	266
4	Impaired Mitochondrial Biogenesis in Adipose Tissue in Acquired Obesity. Diabetes, 2015, 64, 3135-3145.	0.3	263
5	Liver Fat Is Increased in Type 2 Diabetic Patients and Underestimated by Serum Alanine Aminotransferase Compared With Equally Obese Nondiabetic Subjects. Diabetes Care, 2008, 31, 165-169.	4.3	200
6	Effect of short-term carbohydrate overfeeding and long-term weight loss on liver fat in overweight humans. American Journal of Clinical Nutrition, 2012, 96, 727-734.	2.2	171
7	Niacin Cures Systemic NAD+ Deficiency and Improves Muscle Performance in Adult-Onset Mitochondrial Myopathy. Cell Metabolism, 2020, 31, 1078-1090.e5.	7.2	154
8	Personal modelâ€assisted identification of NAD⁺ andÂglutathione metabolism as intervention target in NAFLD. Molecular Systems Biology, 2017, 13, 916.	3.2	147
9	Effect of a ketogenic diet on hepatic steatosis and hepatic mitochondrial metabolism in nonalcoholic fatty liver disease. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7347-7354.	3.3	137
10	Dual Metabolic Defects Are Required to Produce Hypertriglyceridemia in Obese Subjects. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 2144-2150.	1.1	133
11	Genetic variation in PNPLA3 (adiponutrin) confers sensitivity to weight lossâ€“induced decrease in liver fat in humans. American Journal of Clinical Nutrition, 2011, 94, 104-111.	2.2	131
12	Prediction of non-alcoholic fatty-liver disease and liver fat content by serum molecular lipids. Diabetologia, 2013, 56, 2266-2274.	2.9	129
13	Cholesterol synthesis is increased and absorption decreased in non-alcoholic fatty liver disease independent of obesity. Journal of Hepatology, 2011, 54, 153-159.	1.8	123
14	Effects of insulin therapy on liver fat content and hepatic insulin sensitivity in patients with type 2 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E829-E835.	1.8	120
15	Obesity Is Associated With Low NAD⁺/SIRT Pathway Expression in Adipose Tissue of BMI-Discordant Monozygotic Twins. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 275-283.	1.8	120
16	Characterising metabolically healthy obesity in weight-discordant monozygotic twins. Diabetologia, 2014, 57, 167-176.	2.9	118
17	Role of insulin as a negative regulator of plasma endocannabinoid levels in obese and nonobese subjects. European Journal of Endocrinology, 2009, 161, 715-722.	1.9	100
18	Cardiac Steatosis Associates With Visceral Obesity in Nondiabetic Obese Men. Journal of Clinical Endocrinology and Metabolism, 2013, 98, 1189-1197.	1.8	98

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19	Increased coagulation factor VIII, IX, XI and XII activities in non-alcoholic fatty liver disease. Liver International, 2011, 31, 176-183.	1.9	95
20	Human PNPLA3-I148M variant increases hepatic retention of polyunsaturated fatty acids. JCI Insight, 2019, 4, .	2.3	93
21	Adverse effects of fructose on cardiometabolic risk factors and hepatic lipid metabolism in subjects with abdominal obesity. Journal of Internal Medicine, 2017, 282, 187-201.	2.7	89
22	Cardiac steatosis and left ventricular function in men with metabolic syndrome. Journal of Cardiovascular Magnetic Resonance, 2013, 15, 103.	1.6	86
23	Use of HOMA-IR to diagnose non-alcoholic fatty liver disease: a population-based and inter-laboratory study. Diabetologia, 2017, 60, 1873-1882.	2.9	85
24	Adipocyte morphology and implications for metabolic derangements in acquired obesity. International Journal of Obesity, 2014, 38, 1423-1431.	1.6	83
25	Ectopic Fat Depots and Left Ventricular Function in Nondiabetic Men With Nonalcoholic Fatty Liver Disease. Circulation: Cardiovascular Imaging, 2015, 8, .	1.3	83
26	Distinct contributions of metabolic dysfunction and genetic risk factors in the pathogenesis of non-alcoholic fatty liver disease. Journal of Hepatology, 2022, 76, 526-535.	1.8	80
27	Liraglutide treatment improves postprandial lipid metabolism and cardiometabolic risk factors in humans with adequately controlled type 2 diabetes: A singleâ€centre randomized controlled study. Diabetes, Obesity and Metabolism, 2019, 21, 84-94.	2.2	78
28	Genome-wide blood DNA methylation alterations at regulatory elements and heterochromatic regions in monozygotic twins discordant for obesity and liver fat. Clinical Epigenetics, 2015, 7, 39.	1.8	71
29	Paradoxical Dissociation Between Hepatic Fat Content and De Novo Lipogenesis Due to PNPLA3 Sequence Variant. Journal of Clinical Endocrinology and Metabolism, 2015, 100, E821-E825.	1.8	64
30	Longâ€TE ¹H MRS suggests that liver fat is more saturated than subcutaneous and visceral fat. NMR in Biomedicine, 2011, 24, 238-245.	1.6	62
31	Hydroxysteroid 17-Î² dehydrogenase 13 variant increases phospholipids and protects against fibrosis in nonalcoholic fatty liver disease. JCI Insight, 2020, 5, .	2.3	62
32	DNA methylation and gene expression patterns in adipose tissue differ significantly within young adult monozygotic BMI-discordant twin pairs. International Journal of Obesity, 2016, 40, 654-661.	1.6	59
33	Comparison of the Relative Contributions of Intraâ€Abdominal and Liver Fat to Components of the Metabolic Syndrome. Obesity, 2011, 19, 23-28.	1.5	58
34	Kinetic and Related Determinants of Plasma Triglyceride Concentration in Abdominal Obesity. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 2218-2224.	1.1	58
35	Weight Loss Is Associated With Increased NAD+/SIRT1 Expression But Reduced PARP Activity in White Adipose Tissue. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 1263-1273.	1.8	57
36	Modified Atkins diet induces subacute selective raggedâ€redâ€fiber lysis in mitochondrial myopathyÂpatients. EMBO Molecular Medicine, 2016, 8, 1234-1247.	3.3	56

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37	Abdominal obesity and circulating metabolites: A twin study approach. Metabolism: Clinical and Experimental, 2016, 65, 111-121.	1.5	55
38	Mitochondria-related transcriptional signature is downregulated in adipocytes in obesity: a study of young healthy MZ twins. Diabetologia, 2017, 60, 169-181.	2.9	55
39	Liver Fat But Not Other Adiposity Measures Influence Circulating FGF21 Levels in Healthy Young Adult Twins. Journal of Clinical Endocrinology and Metabolism, 2011, 96, E351-E355.	1.8	53
40	Deep subcutaneous adipose tissue is more saturated than superficial subcutaneous adipose tissue. International Journal of Obesity, 2013, 37, 620-622.	1.6	53
41	GLP-1 Responses Are Heritable and Blunted in Acquired Obesity With High Liver Fat and Insulin Resistance. Diabetes Care, 2014, 37, 242-251.	4.3	53
42	Genetic variation in PNPLA3 but not APOC3 influences liver fat in nonâ€alcoholic fatty liver disease. Journal of Gastroenterology and Hepatology (Australia), 2012, 27, 951-956.	1.4	49
43	Nonalcoholic Fatty Liver Disease: Detection of Elevated Nicotinamide Adenine Dinucleotide Phosphate with in Vivo 3.0-T³¹P MR Spectroscopy with Proton Decoupling. Radiology, 2010, 256, 466-473.	3.6	48
44	Adipose tissue is inflamed in NAFLD due to obesity but not in NAFLD due to genetic variation in PNPLA3. Diabetologia, 2013, 56, 886-892.	2.9	48
45	Characterizing human adipose tissue lipids by long echo time ¹Hâ€MRS in vivo at 1.5â€‰Tesla: validation by gas chromatography. NMR in Biomedicine, 2010, 23, 466-472.	1.6	46
46	Liver Fat Content and Hepatic Insulin Sensitivity in Overweight Patients With Type 1 Diabetes. Journal of Clinical Endocrinology and Metabolism, 2015, 100, 607-616.	1.8	43
47	Epicardial Fat, Cardiac Dimensions, and Low-Grade Inflammation in Young Adult Monozygotic Twins Discordant for Obesity. American Journal of Cardiology, 2012, 109, 1295-1302.	0.7	39
48	Upregulation of Early and Downregulation of Terminal Pathway Complement Genes in Subcutaneous Adipose Tissue and Adipocytes in Acquired Obesity. Frontiers in Immunology, 2017, 8, 545.	2.2	39
49	Role of apolipoprotein Câ€III overproduction in diabetic dyslipidaemia. Diabetes, Obesity and Metabolism, 2019, 21, 1861-1870.	2.2	39
50	Stimulus-induced brain lactate: effects of aging and prolonged wakefulness. Journal of Sleep Research, 2004, 13, 111-119.	1.7	38
51	Effects of TM6SF2 E167K on hepatic lipid and very low-density lipoprotein metabolism in humans. JCI Insight, 2020, 5, .	2.3	38
52	Effects of dietary interventions on liver volume in humans. Obesity, 2014, 22, 989-995.	1.5	34
53	Metabolic Imaging of Human Cognition: An fMRI/1H-MRS Study of Brain Lactate Response to Silent Word Generation. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 942-948.	2.4	33
54	Decrease in circulating fibroblast growth factor 21 after an oral fat load is related to postprandial triglyceride-rich lipoproteins and liver fat. European Journal of Endocrinology, 2012, 166, 487-492.	1.9	32

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55	PRESS echo time behavior of triglyceride resonances at 1.5T: Detecting ï‰-3 fatty acids in adipose tissue in vivo. Journal of Magnetic Resonance, 2009, 201, 39-47.	1.2	31
56	Hepatic lipogenesis and a marker of hepatic lipid oxidation, predict postprandial responses of triglycerideâ€rich lipoproteins. Obesity, 2014, 22, 1854-1859.	1.5	31
57	Gene expression profile of subcutaneous adipose tissue in BMI-discordant monozygotic twin pairs unravels molecular and clinical changes associated with sub-types of obesity. International Journal of Obesity, 2017, 41, 1176-1184.	1.6	31
58	Molecular pathways behind acquired obesity: Adipose tissue and skeletal muscle multiomics in monozygotic twin pairs discordant for BMI. Cell Reports Medicine, 2021, 2, 100226.	3.3	31
59	CB1 blockade-induced weight loss over 48 weeks decreases liver fat in proportion to weight loss in humans. International Journal of Obesity, 2013, 37, 699-703.	1.6	30
60	Metabolome and fecal microbiota in monozygotic twin pairs discordant for weight: a Big Mac challenge. FASEB Journal, 2014, 28, 4169-4179.	0.2	30
61	Cardiac steatosis in patients with dilated cardiomyopathy. Heart, 2014, 100, 1107-1112.	1.2	28
62	Frontal Cortex Myo-Inositol Is Associated with Sleep and Depression in Adolescents: A Proton Magnetic Resonance Spectroscopy Study. Neuropsychobiology, 2017, 75, 21-31.	0.9	28
63	Characterization of different fat depots in NAFLD using inflammation-associated proteome, lipidome and metabolome. Scientific Reports, 2018, 8, 14200.	1.6	28
64	Genetic Variation in SULF2 Is Associated with Postprandial Clearance of Triglyceride-Rich Remnant Particles and Triglyceride Levels in Healthy Subjects. PLoS ONE, 2013, 8, e79473.	1.1	28
65	Impact of proprotein convertase subtilisin/kexin type 9 inhibition with evolocumab on the postprandial responses of triglyceride-rich lipoproteins in type II diabetic subjects. Journal of Clinical Lipidology, 2020, 14, 77-87.	0.6	26
66	Apolipoprotein B48 metabolism in chylomicrons and very lowâ€density lipoproteins and its role in triglyceride transport in normoâ€and hypertriglyceridemic human subjects. Journal of Internal Medicine, 2020, 288, 422-438.	2.7	25
67	Targeting low- or high-normal Carbon dioxide, Oxygen, and Mean arterial pressure After Cardiac Arrest and REsuscitation: study protocol for a randomized pilot trial. Trials, 2017, 18, 507.	0.7	22
68	Phosphorylated IGFBP-1 as a non-invasive predictor of liver fat in NAFLD. Scientific Reports, 2016, 6, 24740.	1.6	21
69	Bone marrow fat unsaturation in young adults is not affected by present or childhood obesity, but increases with age: A pilot study. Metabolism: Clinical and Experimental, 2015, 64, 1574-1581.	1.5	20
70	Effects of liraglutide on the metabolism of triglycerideâ€rich lipoproteins in type 2 diabetes. Diabetes, Obesity and Metabolism, 2021, 23, 1191-1201.	2.2	20
71	Adipocyte size is associated with NAFLD independent of obesity, fat distribution, and PNPLA3 genotype. Obesity, 2013, 21, 1174-1179.	1.5	19
72	Minor Contribution of Endogenous GLP-1 and GLP-2 to Postprandial Lipemia in Obese Men. PLoS ONE, 2016, 11, e0145890.	1.1	19

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73	Fructose intervention for 12 weeks does not impair glycemic control or incretin hormone responses during oral glucose or mixed meal tests in obese men. Nutrition, Metabolism and Cardiovascular Diseases, 2017, 27, 534-542.	1.1	18
74	Predictors of Liver Fat and Stiffness in Non-Alcoholic Fatty Liver Disease (NAFLD) â€“ an 11-Year Prospective Study. Scientific Reports, 2017, 7, 14561.	1.6	18
75	Obesity/insulin resistance rather than liver fat increases coagulation factor activities and expression in humans. Thrombosis and Haemostasis, 2017, 117, 286-294.	1.8	18
76	Effects of Evolocumab on the Postprandial Kinetics of Apo (Apolipoprotein) B100- and B48-Containing Lipoproteins in Subjects With Type 2 Diabetes. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 962-975.	1.1	18
77	The PNPLA3â€I148M variant increases polyunsaturated triglycerides in human adipose tissue. Liver International, 2020, 40, 2128-2138.	1.9	17
78	The PNPLA3-I148M Variant Confers an Antiatherogenic Lipid Profile in Insulin-resistant Patients. Journal of Clinical Endocrinology and Metabolism, 2021, 106, e300-e315.	1.8	17
79	Impact of nonâ€alcoholic fatty liver disease on liver volume in humans. Hepatology Research, 2015, 45, 210-219.	1.8	16
80	Association of intramyocellular, intraperitoneal and liver fat with glucose tolerance in severely obese adolescents. European Journal of Endocrinology, 2010, 163, 413-419.	1.9	15
81	Metabolism of sex steroids is influenced by acquired adiposityâ€”A study of young adult male monozygotic twin pairs. Journal of Steroid Biochemistry and Molecular Biology, 2017, 172, 98-105.	1.2	15
82	Preliminary findings of proton magnetic resonance spectroscopy in occipital cortex during sleep deprivation. Psychiatry Research - Neuroimaging, 2006, 147, 41-46.	0.9	13
83	Plasma metabolites reveal distinct profiles associating with different metabolic risk factors in monozygotic twin pairs. International Journal of Obesity, 2019, 43, 487-502.	1.6	13
84	F13A1 transglutaminase expression in human adipose tissue increases in acquired excess weight and associates with inflammatory status of adipocytes. International Journal of Obesity, 2021, 45, 577-587.	1.6	13
85	Liver Fat and Insulin Sensitivity Define Metabolite Profiles During a Glucose Tolerance Test in Young Adult Twins. Journal of Clinical Endocrinology and Metabolism, 2016, 102, jc.2015-3512.	1.8	12
86	Physical activity, cardiorespiratory fitness, and metabolic outcomes in monozygotic twin pairs discordant for body mass index. Scandinavian Journal of Medicine and Science in Sports, 2018, 28, 1048-1055.	1.3	12
87	Cardiorespiratory Fitness and Adiposity as Determinants of Metabolic Healthâ€”Pooled Analysis of Two Twin Cohorts. Journal of Clinical Endocrinology and Metabolism, 2017, 102, 1520-1528.	1.8	11
88	Metabolic syndrome associates with left atrial dysfunction. Nutrition, Metabolism and Cardiovascular Diseases, 2018, 28, 727-734.	1.1	11
89	Epigenetic dysregulation of genes related to synaptic long-term depression among adolescents with depressive disorder and sleep symptoms. Sleep Medicine, 2019, 61, 95-103.	0.8	11
90	Increased body fat mass and androgen metabolism â€“ A twin study in healthy young women. Steroids, 2018, 140, 24-31.	0.8	9

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91	Electrocardiographic changes associated with insulin resistance. Nutrition, Metabolism and Cardiovascular Diseases, 2014, 24, 315-320.	1.1	7
92	Measuring short-term liver metabolism non-invasively: postprandial and post-exercise 1H and 31P MR spectroscopy. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2015, 28, 57-66.	1.1	7
93	31Phosphorus magnetic resonance spectroscopy of the liver for evaluating inflammation and fibrosis in autoimmune hepatitis. Scandinavian Journal of Gastroenterology, 2017, 52, 886-892.	0.6	7
94	Treatment response of colorectal cancer liver metastases to neoadjuvant or conversion therapy: a prospective multicentre follow-up study using MRI, diffusion-weighted imaging and 1H-MR spectroscopy compared with histology (subgroup in the RAXO trial). ESMO Open, 2021, 6, 100208.	2.0	7
95	Fat accumulates preferentially in the right rather than the left liver lobe in non-diabetic subjects. Digestive and Liver Disease, 2018, 50, 168-174.	0.4	7
96	Matrisome alterations in obesity â€“ Adipose tissue transcriptome study on monozygotic weight-discordant twins. Matrix Biology, 2022, 108, 1-19.	1.5	7
97	Acquired liver fat is a key determinant of serum lipid alterations in healthy monozygotic twins. Obesity, 2013, 21, 1815-1822.	1.5	6
98	Global and Widespread Local White Matter Abnormalities in Juvenile Neuronal Ceroid Lipofuscinosis. American Journal of Neuroradiology, 2018, 39, 1349-1354.	1.2	6
99	Natural Course of Nonalcoholic Fatty Liver Disease and Type 2 Diabetes in Patients With Human Immunodeficiency Virus With and Without Combination Antiretroviral Therapyâ€“associated Lipodystrophy: A 16-Year Follow-up Study. Clinical Infectious Diseases, 2020, 70, 1708-1716.	2.9	6
100	Liver Fat, Adipose Tissue, and Body Composition Changes After Switching from a Protease Inhibitor or Efavirenz to Raltegravir. AIDS Patient Care and STDs, 2021, 35, 335-341.	1.1	6
101	Biomarkers and prediction of myocardial triglyceride content in non-diabetic men. Nutrition, Metabolism and Cardiovascular Diseases, 2016, 26, 134-140.	1.1	5
102	Effects of PNPLA3 I148M on hepatic lipid and veryâ€lowâ€density lipoprotein metabolism in humans. Journal of Internal Medicine, 2022, 291, 218-223.	2.7	5
103	ApoA-II HDL Catabolism and Its Relationships With the Kinetics of ApoA-I HDL and of VLDL1, in Abdominal Obesity. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 1398-1406.	1.8	4
104	Metabolic profile of liver damage in non-cirrhotic virus C and autoimmune hepatitis: A proton decoupled 31 P-MRS study. European Journal of Radiology, 2017, 90, 205-211.	1.2	4
105	Brain Volumes and Abnormalities in Adults Born Preterm at Very Low Birth Weight. Journal of Pediatrics, 2022, 246, 48-55.e7.	0.9	4
106	Saturated fat is more metabolically harmful for the human liver than polyunsaturated fat or simple sugars. Journal of Hepatology, 2018, 68, S836.	1.8	3
107	Role of endogenous incretins in the regulation of postprandial lipoprotein metabolism. European Journal of Endocrinology, 2022, 187, 75-84.	1.9	2
108	Abdominal adipose tissue and liver fat imaging in very low birth weight adults born preterm: birth cohort with sibling-controls. Scientific Reports, 2022, 12, .	1.6	2

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109	Adipocyte Size In Obesity With And Without Metabolic Syndrome. Atherosclerosis, 2019, 287, e72.	0.4	1