Mustafa Atalay

List of Publications by Year
in descending order

113 papers	11,933 citations	71102 41 h-index	29157 104 g-index
113 all docs	113 docs citations	113 times ranked	21667 citing authors

#	Article	IF	Citations
1	Large-scale association analysis provides insights into the genetic architecture and pathophysiology of type 2 diabetes. Nature Genetics, 2012, 44, 981-990.	21.4	1,748
2	Genome-wide trans-ancestry meta-analysis provides insight into the genetic architecture of type 2 diabetes susceptibility. Nature Genetics, 2014, 46, 234-244.	21.4	959
3	A genome-wide approach accounting for body mass index identifies genetic variants influencing fasting glycemic traits and insulin resistance. Nature Genetics, 2012, 44, 659-669.	21.4	762
4	Large-scale association analyses identify new loci influencing glycemic traits and provide insight into the underlying biological pathways. Nature Genetics, 2012, 44, 991-1005.	21.4	746
5	Genome-wide meta-analysis identifies 11 new loci for anthropometric traits and provides insights into genetic architecture. Nature Genetics, 2013, 45, 501-512.	21.4	578
6	Oxygen Consumption and Usage During Physical Exercise: The Balance Between Oxidative Stress and ROS-Dependent Adaptive Signaling. Antioxidants and Redox Signaling, 2013, 18, 1208-1246.	5.4	457
7	Physical Activity Attenuates the Influence of FTO Variants on Obesity Risk: A Meta-Analysis of 218,166 Adults and 19,268 Children. PLoS Medicine, 2011, 8, e1001116.	8.4	446
8	Chemistry and biochemistry of lipid peroxidation products. Free Radical Research, 2010, 44, 1098-1124.	3.3	425
9	Genome-wide associations for birth weight and correlations with adult disease. Nature, 2016, 538, 248-252.	27.8	406
10	Maternal and fetal genetic effects on birth weight and their relevance to cardio-metabolic risk factors. Nature Genetics, 2019, 51, 804-814.	21.4	402
11	Sex-stratified Genome-wide Association Studies Including 270,000 Individuals Show Sexual Dimorphism in Genetic Loci for Anthropometric Traits. PLoS Genetics, 2013, 9, e1003500.	3.5	371
12	Genome-wide association analysis identifies three new susceptibility loci for childhood body mass index. Human Molecular Genetics, 2016, 25, 389-403.	2.9	275
13	Anti-angiogenic, Antioxidant, and Anti-carcinogenic Properties of a Novel Anthocyanin-Rich Berry Extract Formula. Biochemistry (Moscow), 2004, 69, 75-80.	1.5	263
14	Exercise Plays a Preventive Role Against Alzheimer's Disease. Journal of Alzheimer's Disease, 2010, 20, 777-783.	2.6	252
15	Life-Course Genome-wide Association Study Meta-analysis of Total Body BMD and Assessment of Age-Specific Effects. American Journal of Human Genetics, 2018, 102, 88-102.	6.2	252
16	Exercise alters SIRT1, SIRT6, NAD and NAMPT levels in skeletal muscle of aged rats. Mechanisms of Ageing and Development, 2010, 131, 21-28.	4.6	230
17	Exercise training modulates heat shock protein response in diabetic rats. Journal of Applied Physiology, 2004, 97, 605-611.	2.5	168
18	Heat Shock Proteins in Diabetes and Wound Healing. Current Protein and Peptide Science, 2009, 10, 85-95.	1.4	118

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19	Cortical spreading depression induces oxidative stress in the trigeminal nociceptive system. Neuroscience, 2013, 253, 341-349.	2.3	117
20	A novel common variant in DCST2 is associated with length in early life and height in adulthood. Human Molecular Genetics, 2015, 24, 1155-1168.	2.9	109
21	Validation of protein carbonyl measurement: A multi-centre study. Redox Biology, 2015, 4, 149-157.	9.0	102
22	Inflammation markers are modulated by responses to diets differing in postprandial insulin responses in individuals with the metabolic syndrome. American Journal of Clinical Nutrition, 2008, 87, 1497-1503.	4.7	91
23	Altered oxidative stress in overtrained athletes. Journal of Sports Sciences, 2010, 28, 309-317.	2.0	89
24	Natural thermal adaptation increases heat shock protein levels and decreases oxidative stress. Redox Biology, 2014, 3, 25-28.	9.0	86
25	Effect of weight loss on cytokine messenger RNA expression in peripheral blood mononuclear cells of obese subjects with the metabolic syndrome. Metabolism: Clinical and Experimental, 2008, 57, 192-199.	3.4	85
26	Diabetes, oxidative stress and physical exercise. Journal of Sports Science and Medicine, 2002, 1, 1-14.	1.6	77
27	Î±-Lipoic acid supplementation: tissue glutathione homeostasis at rest and after exercise. Journal of Applied Physiology, 1999, 86, 1191-1196.	2.5	76
28	A trans-ancestral meta-analysis of genome-wide association studies reveals loci associated with childhood obesity. Human Molecular Genetics, 2019, 28, 3327-3338.	2.9	76
29	Fish oil and vitamin E supplementation in oxidative stress at rest and after physical exercise. Journal of Applied Physiology, 1997, 83, 189-195.	2.5	70
30	Skeletal muscle and heart antioxidant defences in response to sprint training. Acta Physiologica Scandinavica, 1996, 158, 129-134.	2.2	67
31	Altered antioxidant enzyme defences in insulin-dependent diabetic men with increased resting and exercise-induced oxidative stress. Acta Physiologica Scandinavica, 1997, 161, 195-201.	2.2	66
32	Effects of endurance training on tissue glutathione homeostasis and lipid peroxidation in streptozotocin-induced diabetic rats. Scandinavian Journal of Medicine and Science in Sports, 2002, 12, 163-170.	2.9	61
33	Decline in cellular clearance systems induces inflammasome signaling in human ARPE-19 cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 3038-3046.	4.1	60
34	Nordic walking decreased circulating chemerin and leptin concentrations in middle-aged men with impaired glucose regulation. Annals of Medicine, 2013, 45, 162-170.	3.8	59
35	Downregulation of genes involved in NFÎºB activation in peripheral blood mononuclear cells after weight loss is associated with the improvement of insulin sensitivity in individuals with the metabolic syndrome: the GENOBIN study. Diabetologia, 2008, 51, 2060-2067.	6.3	57
36	An inter-laboratory validation of methods of lipid peroxidation measurement in UVA-treated human plasma samples. Free Radical Research, 2010, 44, 1203-1215.	3.3	56

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37	Serum Sex Hormoneâ€“Binding Globulin and Cortisol Concentrations are Associated With Overreaching During Strenuous Military Training. Journal of Strength and Conditioning Research, 2011, 25, 787-797.	2.1	55
38	Diabetes impairs exercise training-associated thioredoxin response and glutathione status in rat brain. Journal of Applied Physiology, 2009, 106, 461-467.	2.5	52
39	Exercise-induced oxidative stress and muscle stress protein responses in trotters. European Journal of Applied Physiology, 2005, 93, 496-501.	2.5	51
40	Exercise improves import of 8-oxoguanine DNA glycosylase into the mitochondrial matrix of skeletal muscle and enhances the relative activity. Free Radical Biology and Medicine, 2009, 46, 238-243.	2.9	48
41	The effect of fatty or lean fish intake on inflammatory gene expression in peripheral blood mononuclear cells of patients with coronary heart disease. European Journal of Nutrition, 2009, 48, 447-455.	3.9	47
42	Piperine: Old Spice and New Nutraceutical?. Current Pharmaceutical Design, 2019, 25, 1729-1739.	1.9	45
43	The beneficial effects of nettle supplementation and exercise on brain lesion and memory in rat. Journal of Nutritional Biochemistry, 2009, 20, 974-981.	4.2	43
44	Heat shock protein 60 response to exercise in diabetes. Journal of Diabetes and Its Complications, 2006, 20, 257-261.	2.3	42
45	A key angiogenic role of monocyte chemoattractant protein-1 in hemangioendothelioma proliferation. American Journal of Physiology - Cell Physiology, 2004, 287, C866-C873.	4.6	41
46	Dietary Antioxidants for the Athlete. Current Sports Medicine Reports, 2006, 5, 182-186.	1.2	41
47	Association of MBOAT7 gene variant with plasma ALT levels in children: the PANIC study. Pediatric Research, 2016, 80, 651-655.	2.3	41
48	Physical Exercise and Antioxidant Defenses in the Hearta. Annals of the New York Academy of Sciences, 1999, 874, 169-177.	3.8	40
49	Oxygen radical absorbance capacity (ORAC) and exercise-induced oxidative stress in trotters. European Journal of Applied Physiology, 2005, 95, 550-556.	2.5	39
50	The Effects of Chromium Picolinate and Chromium Histidinate Administration on NF-Î²B and Nrf2/HO-1 Pathway in the Brain of Diabetic Rats. Biological Trace Element Research, 2012, 150, 291-296.	3.5	38
51	Body fat mass, lean body mass and associated biomarkers as determinants of bone mineral density in children 6â€“8 years of age â€“ The Physical Activity and Nutrition in Children (PANIC) study. Bone, 2018, 108, 106-114.	2.9	37
52	Maternal and fetal genetic contribution to gestational weight gain. International Journal of Obesity, 2018, 42, 775-784.	3.4	36
53	Glutathione-dependent modulation of exhausting exercise-induced changes in neutrophil function of rats. European Journal of Applied Physiology and Occupational Physiology, 1996, 74, 342-347.	1.2	34
54	Chromium picolinate and chromium histidinate protects against renal dysfunction by modulation of NF-Î²B pathway in high-fat diet fed and Streptozotocin-induced diabetic rats. Nutrition and Metabolism, 2012, 9, 30.	3.0	34

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55	Expression of ghrelin gene in peripheral blood mononuclear cells and plasma ghrelin concentrations in patients with metabolic syndrome.. European Journal of Endocrinology, 2008, 158, 499-510.	3.7	33
56	Association of Military Training with Oxidative Stress and Overreaching. Medicine and Science in Sports and Exercise, 2011, 43, 1552-1560.	0.4	33
57	Alpha-Lipoic Acid Modulates Heat Shock Factor-1 Expression in Streptozotocin-Induced Diabetic Rat Kidney. Antioxidants and Redox Signaling, 2007, 9, 497-506.	5.4	32
58	Effects of Prolonged Dietary Curcumin Exposure on Skeletal Muscle Biochemical and Functional Responses of Aged Male Rats. International Journal of Molecular Sciences, 2019, 20, 1178.	4.1	32
59	Markers of absorption and synthesis of cholesterol in men with type 1 diabetes. Diabetes/Metabolism Research and Reviews, 2007, 23, 372-377.	4.0	29
60	12 Weeksâ€™ aerobic and resistance training without dietary intervention did not influence oxidative stress but aerobic training decreased atherogenic index in middle-aged men with impaired glucose regulation. Food and Chemical Toxicology, 2013, 61, 127-135.	3.6	29
61	Effects of prolonged exercise on oxidative stress and antioxidant defense in endurance horse. Journal of Sports Science and Medicine, 2005, 4, 415-21.	1.6	29
62	The effects of some Mannich bases on heat shock proteins HSC70 and GRP75, and thioredoxin and glutaredoxin levels in Jurkat cells. Toxicology in Vitro, 2005, 19, 573-580.	2.4	27
63	Effects of muscular dystrophy, exercise and blocking activin receptor IIB ligands on the unfolded protein response and oxidative stress. Free Radical Biology and Medicine, 2016, 99, 308-322.	2.9	27
64	Î±-Lipoic acid modulates thiol antioxidant defences and attenuates exercise-induced oxidative stress in standardbred trotters. Free Radical Research, 2009, 43, 697-705.	3.3	26
65	Radicicol but not geldanamycin evokes oxidative stress response and efflux protein inhibition in ARPE-19 human retinal pigment epithelial cells. European Journal of Pharmacology, 2008, 584, 229-236.	3.5	24
66	Heart rate variability in trotters during different training periods. Equine Veterinary Journal, 2006, 38, 214-217.	1.7	23
67	Plasma irisin is increased following 12 weeks of Nordic walking and associates with glucose homoeostasis in overweight/obese men with impaired glucose regulation. European Journal of Sport Science, 2019, 19, 258-266.	2.7	23
68	Associations of <scp>I148M</scp> variant in <scp>PNPLA3</scp> gene with plasma <scp>ALT</scp> levels during 2â€year followâ€up in normal weight and overweight children: the <scp>PANIC</scp> Study. Pediatric Obesity, 2015, 10, 84-90.	2.8	22
69	Abdominal adiposity and cardiometabolic risk factors in children and adolescents: a Mendelian randomization analysis. American Journal of Clinical Nutrition, 2019, 110, 1079-1087.	4.7	22
70	A 2Âyear physical activity and dietary intervention attenuates the increase in insulin resistance in a general population of children: the PANIC study. Diabetologia, 2020, 63, 2270-2281.	6.3	22
71	Î±-Lipoic acid supplementation enhances heat shock protein production and decreases post exercise lactic acid concentrations in exercised standardbred trotters. Research in Veterinary Science, 2009, 87, 462-467.	1.9	21
72	Long-Term Exercise Protects against Cellular Stresses in Aged Mice. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-10.	4.0	21

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73	Cytotoxic activity of 4â€²-hydroxychalcone derivatives against Jurkat cells and their effects on mammalian DNA topoisomerase I. Journal of Enzyme Inhibition and Medicinal Chemistry, 2009, 24, 804-807.	5.2	20
74	Effects of Easy-to-Use Protein-Rich Energy Bar on Energy Balance, Physical Activity and Performance during 8 Days of Sustained Physical Exertion. PLoS ONE, 2012, 7, e47771.	2.5	20
75	Changes in cytokines, leptin, and IGF-1 levels in overtrained athletes during a prolonged recovery phase: A case-control study. Journal of Sports Sciences, 2017, 35, 2342-2349.	2.0	20
76	Synthesis of some Mannich bases with dimethylamine and their hydrazones and evaluation of their cytotoxicity against Jurkat cells. Arzneimittelforschung, 2011, 61, 366-371.	0.4	19
77	The 148 M allele of the PNPLA3 is associated with plasma irisin levels in a population sample of Caucasian children: The PANIC Study. Metabolism: Clinical and Experimental, 2015, 64, 793-796.	3.4	19
78	Association of plasma fatty acid composition with plasma irisin levels in normal weight and overweight/obese children. Pediatric Obesity, 2016, 11, 299-305.	2.8	17
79	Exercise training with dietary counselling increases mitochondrial chaperone expression in middle-aged subjects with impaired glucose tolerance. BMC Endocrine Disorders, 2008, 8, 3.	2.2	16
80	Genetic variations of leptin and leptin receptor are associated with body composition changes in response to physical training. Cell Biochemistry and Function, 2010, 28, 306-312.	2.9	16
81	Impact of Wheat Aleurone Structure on Metabolic Disorders Caused by a High-Fat Diet in Mice. Journal of Agricultural and Food Chemistry, 2014, 62, 10101-10109.	5.2	16
82	Exercise training and experimental diabetes modulate heat shock protein response in brain. Scandinavian Journal of Medicine and Science in Sports, 2010, 20, 83-89.	2.9	14
83	Common Genetic Variation in the IGF1 Associates with Maximal Force Output. Medicine and Science in Sports and Exercise, 2011, 43, 2368-2374.	0.4	14
84	Elevated concentration of oxidized LDL together with poor cardiorespiratory and abdominal muscle fitness predicts metabolic syndrome in young men. Metabolism: Clinical and Experimental, 2013, 62, 992-999.	3.4	14
85	Decreased Thioredoxin-1 and Increased HSP90 Expression in Skeletal Muscle in Subjects with Type 2 Diabetes or Impaired Glucose Tolerance. BioMed Research International, 2014, 2014, 1-6.	1.9	14
86	Associations of TM6SF2 167K allele with liver enzymes and lipid profile in children: the PANIC Study. Pediatric Research, 2016, 79, 684-688.	2.3	14
87	Genetic predisposition to adiposity is associated with increased objectively assessed sedentary time in young children. International Journal of Obesity, 2018, 42, 111-114.	3.4	14
88	Endurance training and glutathione-dependent antioxidant defense mechanism in heart of the diabetic rats. Journal of Sports Science and Medicine, 2003, 2, 52-61.	1.6	14
89	Associations of physical activity, sedentary time, and diet quality with biomarkers of inflammation in children. European Journal of Sport Science, 2022, 22, 906-915.	2.7	13
90	The effects of cocoa supplementation, caloric restriction, and regular exercise, on oxidative stress markers of brain and memory in the rat model. Food and Chemical Toxicology, 2013, 61, 36-41.	3.6	12

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91	Age-dependent action of reactive oxygen species on transmitter release in mammalian neuromuscular junctions. Neurobiology of Aging, 2016, 38, 73-81.	3.1	12
92	Heat Shock Preconditioning Induces Protein Carbonylation and Alters Antioxidant Protection in Superficially Injured Guinea Pig Gastric Mucosa In Vitro. Digestive Diseases and Sciences, 2007, 52, 1897-1905.	2.3	11
93	Suppressed heat shock protein response in the kidney of exerciseâ€trained diabetic rats. Scandinavian Journal of Medicine and Science in Sports, 2018, 28, 1808-1817.	2.9	11
94	Cytotoxicity of 1-Aryl-3-buthylamino-1-propanone Hydrochlorides against Jurkat and L6 Cells. Arzneimittelforschung, 2009, 59, 364-369.	0.4	10
95	Acute Exercise and Thioredoxin-1 in Rat Brain, and Alpha-Lipoic Acid and Thioredoxin-Interacting Protein Response, in Diabetes. International Journal of Sport Nutrition and Exercise Metabolism, 2010, 20, 206-215.	2.1	10
96	Treatments with sodium selenate or doxycycline offset diabetes-induced perturbations of thioredoxin-1 levels and antioxidant capacity. Molecular and Cellular Biochemistry, 2011, 351, 125-131.	3.1	8
97	Activin Receptor Ligand Blocking and Cancer Have Distinct Effects on Protein and Redox Homeostasis in Skeletal Muscle and Liver. Frontiers in Physiology, 2019, 9, 1917.	2.8	8
98	Aerobic Fitness Does Not Modify the Effect of FTO Variation on Body Composition Traits. PLoS ONE, 2012, 7, e51635.	2.5	8
99	Skeletal muscle and liver lipoyllysine content in response to exercise, training and dietary Î±â€lipoic acid supplementation. IUBMB Life, 1998, 46, 297-306.	3.4	7
100	Postconditioning and Remote Postconditioning of Ischemic Rat Cardiac Grafts. European Surgical Research, 2010, 45, 1-8.	1.3	7
101	Skeletal Muscle HSP Expression in Response to Immobilization and Remobilization. International Journal of Sports Medicine, 2007, 28, 281-286.	1.7	6
102	The effects of a 2-year physical activity and dietary intervention on plasma lipid concentrations in children: the PANIC Study. European Journal of Nutrition, 2021, 60, 425-434.	3.9	6
103	A common variation in the promoter region of interleukin-6 gene shows association with exercise performance. Journal of Sports Science and Medicine, 2009, 8, 271-7.	1.6	6
104	Recovery from immobilisation: responses of fast-twitch muscle fibres to spontaneous and intensive exercise in rat calf muscles. Pathophysiology, 2004, 11, 17-22.	2.2	5
105	Antireflux surgery and esophageal mucosal DNA damage. Pathophysiology, 2006, 13, 23-27.	2.2	5
106	Time-of-day effects during acute isokinetic exhaustive eccentric exercise: Serum leptin response. Isokinetics and Exercise Science, 2009, 17, 19-25.	0.4	5
107	Genetic predisposition to higher body fat yet lower cardiometabolic risk in children and adolescents. International Journal of Obesity, 2019, 43, 2007-2016.	3.4	5
108	Immuno-spin trapping detection of antioxidant/pro-oxidant properties of zinc or selenium on DNA and protein radical formation via hydrogen peroxide. Molecular and Cellular Biochemistry, 2015, 409, 23-31.	3.1	4

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109	Functional and biochemical responses of skeletal muscle following a moderate degree of systemic iron loading in mice. Journal of Applied Physiology, 2019, 126, 799-809.	2.5	4
110	Effects of military training on plasma amino acid concentrations and their associations with overreaching. Experimental Biology and Medicine, 2020, 245, 1029-1038.	2.4	3
111	Alphaâ€lipoic acid does not alter stress protein response to acute exercise in diabetic brain. Cell Biochemistry and Function, 2010, 28, 644-650.	2.9	2
112	Plasma irisin and its associations with oxidative stress in athletes suffering from overtraining syndrome. Physiology International, 2021, 107, 513-526.	1.6	2
113	Glutathione-dependent modulation of exhausting exercise-induced changes in neutrophil function of rats. European Journal of Applied Physiology, 1996, 74, 342-347.	2.5	1