Christiaan L Leeuwenburgh

List of Publications by Citations

270 papers	25,409 citations	78 h-index	155 g-index
281 ext. papers	28,483 ext. citations	5.7 avg, IF	6.67 L-index

#	Paper	IF	Citations
270	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*, **2016**, 12, 1-222	10.2	3838
269	Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*, **2012**, 8, 445-544	10.2	2783
268	Sirt3 mediates reduction of oxidative damage and prevention of age-related hearing loss under caloric restriction. *Cell*, **2010**, 143, 802-12	56.2	860
267	Molecular inflammation: underpinnings of aging and age-related diseases. *Ageing Research Reviews*, **2009**, 8, 18-30	12	821
266	A low dose of dietary resveratrol partially mimics caloric restriction and retards aging parameters in mice. *PLoS ONE*, **2008**, 3, e2264	3.7	444
265	New insights into the role of mitochondria in aging: mitochondrial dynamics and more. *Journal of Cell Science*, **2010**, 123, 2533-42	5.3	381
264	Reactive nitrogen intermediates promote low density lipoprotein oxidation in human atherosclerotic intima. *Journal of Biological Chemistry*, **1997**, 272, 1433-6	5.4	375
263	Long-term ascorbic acid administration reverses endothelial vasomotor dysfunction in patients with coronary artery disease. *Circulation*, **1999**, 99, 3234-40	16.7	317
262	Exercise training-induced alterations in skeletal muscle antioxidant capacity: a brief review. *Medicine and Science in Sports and Exercise*, **1999**, 31, 987-97	1.2	306
261	Mass spectrometric quantification of markers for protein oxidation by tyrosyl radical, copper, and hydroxyl radical in low density lipoprotein isolated from human atherosclerotic plaques. *Journal of Biological Chemistry*, **1997**, 272, 3520-6	5.4	300
260	Skeletal muscle autophagy and apoptosis during aging: effects of calorie restriction and life-long exercise. *Experimental Gerontology*, **2010**, 45, 138-48	4.5	299
259	Mitochondrial dysfunction and sarcopenia of aging: from signaling pathways to clinical trials. *International Journal of Biochemistry and Cell Biology*, **2013**, 45, 2288-301	5.6	295
258	Apoptosis in skeletal muscle with aging. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2002**, 282, R519-27	3.2	267
257	Doxorubicin treatment in vivo causes cytochrome C release and cardiomyocyte apoptosis, as well as increased mitochondrial efficiency, superoxide dismutase activity, and Bcl-2:Bax ratio. *Cancer Research*, **2002**, 62, 4592-8	10.1	267
256	Frailty syndrome and skeletal muscle: results from the Invecchiare in Chianti study. *American Journal of Clinical Nutrition*, **2006**, 83, 1142-8	7	245
255	Skeletal muscle apoptosis, sarcopenia and frailty at old age. *Experimental Gerontology*, **2006**, 41, 1234-8	4.5	242
254	Age-related hearing loss in C57BL/6J mice is mediated by Bak-dependent mitochondrial apoptosis. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 19432-7	11.5	238

253	Age-associated increases in oxidative stress and antioxidant enzyme activities in cardiac interfibrillar mitochondria: implications for the mitochondrial theory of aging. *FASEB Journal*, **2005**, 19, 419-21	0.9	237
252	Nordihydroguaiaretic acid and aspirin increase lifespan of genetically heterogeneous male mice. *Aging Cell*, **2008**, 7, 641-50	9.9	234
251	Muscle fiber specific apoptosis and TNF-alpha signaling in sarcopenia are attenuated by life-long calorie restriction. *FASEB Journal*, **2005**, 19, 668-70	0.9	213
250	Flipping the Metabolic Switch: Understanding and Applying the Health Benefits of Fasting. *Obesity*, **2018**, 26, 254-268	8	210
249	The impact of aging on mitochondrial function and biogenesis pathways in skeletal muscle of sedentary high- and low-functioning elderly individuals. *Aging Cell*, **2012**, 11, 801-9	9.9	208
248	Mitochondrial DNA mutations induce mitochondrial dysfunction, apoptosis and sarcopenia in skeletal muscle of mitochondrial DNA mutator mice. *PLoS ONE*, **2010**, 5, e11468	3.7	196
247	Mitochondrial pathways in sarcopenia of aging and disuse muscle atrophy. *Biological Chemistry*, **2013**, 394, 393-414	4.5	195
246	Models of accelerated sarcopenia: critical pieces for solving the puzzle of age-related muscle atrophy. *Ageing Research Reviews*, **2010**, 9, 369-83	12	191
245	The role of apoptosis in the normal aging brain, skeletal muscle, and heart. *Annals of the New York Academy of Sciences*, **2002**, 959, 93-107	6.5	191
244	Mitochondrial dysfunction is an early indicator of doxorubicin-induced apoptosis. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2002**, 1588, 94-101	6.9	181
243	Skeletal muscle mitochondrial energetics are associated with maximal aerobic capacity and walking speed in older adults. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2013**, 68, 447-55	6.4	178
242	The role of mitochondrial DNA mutations in aging and sarcopenia: implications for the mitochondrial vicious cycle theory of aging. *Experimental Gerontology*, **2008**, 43, 24-33	4.5	174
241	Aging and the role of reactive nitrogen species. *Annals of the New York Academy of Sciences*, **2002**, 959, 66-81	6.5	172
240	Contribution of impaired mitochondrial autophagy to cardiac aging: mechanisms and therapeutic opportunities. *Circulation Research*, **2012**, 110, 1125-38	15.7	169
239	Caloric restriction in humans: potential pitfalls and health concerns. *Mechanisms of Ageing and Development*, **2006**, 127, 1-7	5.6	168
238	Aging and lifelong calorie restriction result in adaptations of skeletal muscle apoptosis repressor, apoptosis-inducing factor, X-linked inhibitor of apoptosis, caspase-3, and caspase-12. *Free Radical Biology and Medicine*, **2004**, 36, 27-39	7.8	163
237	Age-related differences in apoptosis with disuse atrophy in soleus muscle. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2005**, 288, R1288-96	3.2	160
236	The COVID-19 pandemic and physical activity. *Sports Medicine and Health Science*, **2020**, 2, 55-64	4.5	148

235	Autophagy in the heart and liver during normal aging and calorie restriction. *Rejuvenation Research*, **2007**, 10, 281-92	2.6	146
234	An Aging Interventions Testing Program: study design and interim report. *Aging Cell*, **2007**, 6, 565-75	9.9	143
233	Caloric restriction attenuates dityrosine cross-linking of cardiac and skeletal muscle proteins in aging mice. *Archives of Biochemistry and Biophysics*, **1997**, 346, 74-80	4.1	136
232	Age-related activation of mitochondrial caspase-independent apoptotic signaling in rat gastrocnemius muscle. *Mechanisms of Ageing and Development*, **2008**, 129, 542-9	5.6	136
231	Sarcopenia of aging: underlying cellular mechanisms and protection by calorie restriction. *BioFactors*, **2009**, 35, 28-35	6.1	134
230	Mitochondrial death effectors: relevance to sarcopenia and disuse muscle atrophy. *Biochimica Et Biophysica Acta - General Subjects*, **2010**, 1800, 235-44	4	133
229	Role of mitochondrial dysfunction and altered autophagy in cardiovascular aging and disease: from mechanisms to therapeutics. *American Journal of Physiology - Heart and Circulatory Physiology*, **2013** , 305, H459-76	5.2	130
228	Mitochondrial DNA mutations, energy metabolism and apoptosis in aging muscle. *Ageing Research Reviews*, **2006**, 5, 179-95	12	127
227	Cytochrome c release from mitochondria in the aging heart: a possible mechanism for apoptosis with age. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2002**, 282, R423-30	3.2	127
226	Resveratrol and novel potent activators of SIRT1: effects on aging and age-related diseases. *Nutrition Reviews*, **2008**, 66, 591-6	6.4	125
225	A hydroxyl radical-like species oxidizes cynomolgus monkey artery wall proteins in early diabetic vascular disease. *Journal of Clinical Investigation*, **2001**, 107, 853-60	15.9	121
224	Autophagy suppresses age-dependent ischemia and reperfusion injury in livers of mice. *Gastroenterology*, **2011**, 141, 2188-2199.e6	13.3	115
223	Method for measuring ATP production in isolated mitochondria: ATP production in brain and liver mitochondria of Fischer-344 rats with age and caloric restriction. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2003**, 285, R1259-67	3.2	114
222	Persistent inflammation, immunosuppression, and catabolism syndrome after severe blunt trauma. *Journal of Trauma and Acute Care Surgery*, **2014**, 76, 21-9; discussion 29-30	3.3	113
221	Mitochondrial quality control mechanisms as molecular targets in cardiac ageing. *Nature Reviews Cardiology*, **2018**, 15, 543-554	14.8	112
220	A dietary supplement attenuates IL-6 and CRP after eccentric exercise in untrained males. *Medicine and Science in Sports and Exercise*, **2003**, 35, 2032-7	1.2	111
219	A method to determine RNA and DNA oxidation simultaneously by HPLC-ECD: greater RNA than DNA oxidation in rat liver after doxorubicin administration. *Biological Chemistry*, **2006**, 387, 103-11	4.5	109
218	Exercise by lifelong voluntary wheel running reduces subsarcolemmal and interfibrillar mitochondrial hydrogen peroxide production in the heart. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2005**, 289, R1564-72	3.2	108

217	Successful aging: Advancing the science of physical independence in older adults. *Ageing Research Reviews*, **2015**, 24, 304-27	12	107
216	Upregulated autophagy protects cardiomyocytes from oxidative stress-induced toxicity. *Autophagy* , **2013**, 9, 328-44	10.2	107
215	The role of apoptosis in age-related skeletal muscle atrophy. *Sports Medicine*, **2005**, 35, 473-83	10.6	106
214	Apoptosis and exercise. *Medicine and Science in Sports and Exercise*, **2001**, 33, 393-6	1.2	106
213	Dysregulation of mitochondrial quality control processes contribute to sarcopenia in a mouse model of premature aging. *PLoS ONE*, **2013**, 8, e69327	3.7	105
212	Role of apoptosis in sarcopenia. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2003**, 58, 999-1001	6.4	103
211	Increased iron content and RNA oxidative damage in skeletal muscle with aging and disuse atrophy. *Experimental Gerontology*, **2008**, 43, 563-70	4.5	101
210	Apoptosis in skeletal myocytes: a potential target for interventions against sarcopenia and physical frailty - a mini-review. *Gerontology*, **2012**, 58, 99-106	5.5	100
209	Cardiac mitochondrial bioenergetics, oxidative stress, and aging. *American Journal of Physiology - Cell Physiology*, **2007**, 292, C1983-92	5.4	99
208	Hydroxyl radical generation during exercise increases mitochondrial protein oxidation and levels of urinary dityrosine. *Free Radical Biology and Medicine*, **1999**, 27, 186-92	7.8	99
207	Doxorubicin treatment in vivo activates caspase-12 mediated cardiac apoptosis in both male and female rats. *FEBS Letters*, **2004**, 577, 483-90	3.8	97
206	Modulation of GH/IGF-1 axis: potential strategies to counteract sarcopenia in older adults. *Mechanisms of Ageing and Development*, **2008**, 129, 593-601	5.6	96
205	Molecular mechanism of PPAR in the regulation of age-related inflammation. *Ageing Research Reviews*, **2008**, 7, 126-36	12	92
204	Isotope dilution mass spectrometric quantification of 3-nitrotyrosine in proteins and tissues is facilitated by reduction to 3-aminotyrosine. *Analytical Biochemistry*, **1998**, 259, 127-35	3.1	89
203	Radical scavenging and reducing ability of tilapia (Oreochromis niloticus) protein hydrolysates. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 10359-67	5.7	89
202	Modulation of age-induced apoptotic signaling and cellular remodeling by exercise and calorie restriction in skeletal muscle. *Free Radical Biology and Medicine*, **2008**, 44, 160-8	7.8	88
201	Fueling Inflamm-Aging through Mitochondrial Dysfunction: Mechanisms and Molecular Targets. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	85
200	Age-related differences in lower extremity tissue compartments and associations with physical function in older adults. *Experimental Gerontology*, **2012**, 47, 38-44	4.5	85

199	Changes in IL-15 expression and death-receptor apoptotic signaling in rat gastrocnemius muscle with aging and life-long calorie restriction. *Mechanisms of Ageing and Development*, **2009**, 130, 272-80	5.6	85
198	Current nutritional recommendations and novel dietary strategies to manage sarcopenia. *Journal of Frailty & Aging,the*, **2013**, 2, 38-53	2.6	85
197	Energy expenditure of calorically restricted rats is higher than predicted from their altered body composition. *Mechanisms of Ageing and Development*, **2005**, 126, 783-93	5.6	83
196	Mitochondrial iron accumulation with age and functional consequences. *Aging Cell*, **2008**, 7, 706-16	9.9	82
195	Detecting oxidative modification of biomolecules with isotope dilution mass spectrometry: sensitive and quantitative assays for oxidized amino acids in proteins and tissues. *Methods in Enzymology*, **1999**, 300, 124-44	1.7	82
194	Beneficial effects of exercise on age-related mitochondrial dysfunction and oxidative stress in skeletal muscle. *Journal of Physiology*, **2016**, 594, 5105-23	3.9	82
193	Mice expressing an error-prone DNA polymerase in mitochondria display elevated replication pausing and chromosomal breakage at fragile sites of mitochondrial DNA. *Nucleic Acids Research*, **2009**, 37, 2327-35	20.1	79
192	Long-term effects of caloric restriction or exercise on DNA and RNA oxidation levels in white blood cells and urine in humans. *Rejuvenation Research*, **2008**, 11, 793-9	2.6	78
191	Iron accumulation with age, oxidative stress and functional decline. *PLoS ONE*, **2008**, 3, e2865	3.7	78
190	Effects of Popular Diets without Specific Calorie Targets on Weight Loss Outcomes: Systematic Review of Findings from Clinical Trials. *Nutrients*, **2017**, 9,	6.7	77
189	Bioenergetics and permeability transition pore opening in heart subsarcolemmal and interfibrillar mitochondria: effects of aging and lifelong calorie restriction. *Mechanisms of Ageing and Development*, **2009**, 130, 297-307	5.6	74
188	Circulating Mitochondrial DNA at the Crossroads of Mitochondrial Dysfunction and Inflammation During Aging and Muscle Wasting Disorders. *Rejuvenation Research*, **2018**, 21, 350-359	2.6	74
187	The Effects of Time Restricted Feeding on Overweight, Older Adults: A Pilot Study. *Nutrients*, **2019**, 11,	6.7	71
186	C-reactive protein genotypes affect baseline, but not exercise training-induced changes, in C-reactive protein levels. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2004**, 24, 1874-9	9.4	69
185	Skeletal muscle apoptotic signaling predicts thigh muscle volume and gait speed in community-dwelling older persons: an exploratory study. *PLoS ONE*, **2012**, 7, e32829	3.7	68
184	Practicality of intermittent fasting in humans and its effect on oxidative stress and genes related to aging and metabolism. *Rejuvenation Research*, **2015**, 18, 162-72	2.6	67
183	Benchmarking clinical outcomes and the immunocatabolic phenotype of chronic critical illness after sepsis in surgical intensive care unit patients. *Journal of Trauma and Acute Care Surgery*, **2018**, 84, 342-349	3.3	66
182	Lifelong exercise and mild (8%) caloric restriction attenuate age-induced alterations in plantaris muscle morphology, oxidative stress and IGF-1 in the Fischer-344 rat. *Experimental Gerontology*, **2008**, 43, 317-29	4.5	66

181	Effects of caloric restriction and exercise on age-related, chronic inflammation assessed by C-reactive protein and interleukin-6. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2006**, 61, 211-7	6.4	65
180	Oxidative damage increases with reproductive energy expenditure and is reduced by food-supplementation. *Evolution; International Journal of Organic Evolution*, **2013**, 67, 1527-36	3.8	64
179	Tumor necrosis factor alpha signaling in skeletal muscle: effects of age and caloric restriction. *Journal of Nutritional Biochemistry*, **2006**, 17, 501-8	6.3	64
178	Calorie restriction combined with resveratrol induces autophagy and protects 26-month-old rat hearts from doxorubicin-induced toxicity. *Free Radical Biology and Medicine*, **2014**, 74, 252-62	7.8	63
177	Increased oxidative stress in kwashiorkor. *Journal of Pediatrics*, **2000**, 137, 421-4	3.6	63
176	Urinary analysis of 8-oxoguanine, 8-oxoguanosine, fapy-guanine and 8-oxo-2Pdeoxyguanosine by high-performance liquid chromatography-electrospray tandem mass spectrometry as a measure of oxidative stress. *Journal of Chromatography A*, **2007**, 1167, 54-62	4.5	61
175	Hepatic oxidative stress during aging: effects of 8% long-term calorie restriction and lifelong exercise. *Antioxidants and Redox Signaling*, **2006**, 8, 529-38	8.4	61
174	Life long calorie restriction increases heat shock proteins and proteasome activity in soleus muscles of Fisher 344 rats. *Experimental Gerontology*, **2005**, 40, 37-42	4.5	61
173	Effects of age and sedentary lifestyle on skeletal muscle NF-kappaB signaling in men. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2010**, 65, 532-7	6.4	59
172	The emerging role of iron dyshomeostasis in the mitochondrial decay of aging. *Mechanisms of Ageing and Development*, **2010**, 131, 487-93	5.6	59
171	Mitochondrial DNA mutations and apoptosis in mammalian aging. *Cancer Research*, **2006**, 66, 7386-9	10.1	59
170	Evaluation of sex differences on mitochondrial bioenergetics and apoptosis in mice. *Experimental Gerontology*, **2007**, 42, 173-82	4.5	58
169	A Detailed Characterization of the Dysfunctional Immunity and Abnormal Myelopoiesis Induced by Severe Shock and Trauma in the Aged. *Journal of Immunology*, **2015**, 195, 2396-407	5.3	57
168	Effects of short-term GH supplementation and treadmill exercise training on physical performance and skeletal muscle apoptosis in old rats. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2008**, 294, R558-67	3.2	57
167	Life-long calorie restriction in Fischer 344 rats attenuates age-related loss in skeletal muscle-specific force and reduces extracellular space. *Journal of Applied Physiology*, **2003**, 95, 2554-62	3.7	57
166	Dietary restriction: standing up for sirtuins. *Science*, **2010**, 329, 1012-3; author reply 1013-4	33.3	56
165	Fatty streak formation in fat-fed mice expressing human copper-zinc superoxide dismutase. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **1997**, 17, 1734-40	9.4	56
164	Impaired iron status in aging research. *International Journal of Molecular Sciences*, **2012**, 13, 2368-86	6.3	55

163	Autophagy and leucine promote chronological longevity and respiration proficiency during calorie restriction in yeast. *Experimental Gerontology*, **2013**, 48, 1107-19	4.5	54
162	Influence of calorie restriction on measures of age-related cognitive decline: role of increased physical activity. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2009**, 64, 850-9	6.4	54
161	Aging and calorie restriction oppositely affect mitochondrial biogenesis through TFAM binding at both origins of mitochondrial DNA replication in rat liver. *PLoS ONE*, **2013**, 8, e74644	3.7	53
160	Advanced age is associated with worsened outcomes and a unique genomic response in severely injured patients with hemorrhagic shock. *Critical Care*, **2015**, 19, 77	10.8	52
159	Protective immunity and defects in the neonatal and elderly immune response to sepsis. *Journal of Immunology*, **2014**, 192, 3156-65	5.3	52
158	Safety and metabolic outcomes of resveratrol supplementation in older adults: results of a twelve-week, placebo-controlled pilot study. *Experimental Gerontology*, **2014**, 57, 181-7	4.5	52
157	Comparison of lifelong and late life exercise on oxidative stress in the cerebellum. *Neurobiology of Aging*, **2009**, 30, 903-9	5.6	52
156	Lifelong caloric restriction increases expression of apoptosis repressor with a caspase recruitment domain (ARC) in the brain. *FASEB Journal*, **2003**, 17, 494-6	0.9	52
155	Chronic pain, perceived stress, and cellular aging: an exploratory study. *Molecular Pain*, **2012**, 8, 12	3.4	51
154	Cellular mechanisms of cardioprotection by calorie restriction: state of the science and future perspectives. *Clinics in Geriatric Medicine*, **2009**, 25, 715-32, ix	3.8	51
153	Persistent inflammation, immunosuppression, and catabolism and the development of chronic critical illness after surgery. *Surgery*, **2018**, 164, 178-184	3.6	49
152	Effect of intermittent phrenic nerve stimulation during cardiothoracic surgery on mitochondrial respiration in the human diaphragm. *Critical Care Medicine*, **2014**, 42, e152-6	1.4	48
151	Sepsis and Critical Illness Research Center investigators: protocols and standard operating procedures for a prospective cohort study of sepsis in critically ill surgical patients. *BMJ Open*, **2017**, 7, e015136	3	48
150	Dietary Antioxidants as Modifiers of Physiologic Adaptations to Exercise. *Medicine and Science in Sports and Exercise*, **2015**, 47, 1857-68	1.2	48
149	Effects of a weight loss plus exercise program on physical function in overweight, older women: a randomized controlled trial. *Clinical Interventions in Aging*, **2011**, 6, 141-9	4	48
148	Age- and calorie restriction-related changes in rat brain mitochondrial DNA and TFAM binding. *Age*, **2013**, 35, 1607-20		47
147	Multiple pathways to the same end: mechanisms of myonuclear apoptosis in sarcopenia of aging. *Scientific World Journal, The*, **2010**, 10, 340-9	2.2	47
146	Lifelong calorie restriction alleviates age-related oxidative damage in peripheral nerves. *Rejuvenation Research*, **2010**, 13, 65-74	2.6	46

145	Short-term CR decreases cardiac mitochondrial oxidant production but increases carbonyl content. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2004**, 286, R254-9	3.2	43
144	Redox balance in the aging microcirculation: new friends, new foes, and new clinical directions. *Microcirculation*, **2012**, 19, 19-28	2.9	41
143	Molecular architecture of myelinated peripheral nerves is supported by calorie restriction with aging. *Aging Cell*, **2009**, 8, 178-91	9.9	41
142	Anabolic effects of testosterone are preserved during inhibition of 5alpha-reductase. *American Journal of Physiology - Endocrinology and Metabolism*, **2007**, 293, E507-14	6	40
141	Short-term caloric restriction, resveratrol, or combined treatment regimens initiated in late-life alter mitochondrial protein expression profiles in a fiber-type specific manner in aged animals. *Experimental Gerontology*, **2013**, 48, 858-68	4.5	39
140	The hydrogen sulfide signaling system: changes during aging and the benefits of caloric restriction. *Age*, **2010**, 32, 467-81		39
139	Impact of inflammation on the relationship among alcohol consumption, mortality, and cardiac events: the health, aging, and body composition study. *Archives of Internal Medicine*, **2006**, 166, 1490-7		39
138	Short-term caloric restriction and sites of oxygen radical generation in kidney and skeletal muscle mitochondria. *Annals of the New York Academy of Sciences*, **2004**, 1019, 333-42	6.5	39
137	Effect of Low-Intensity vs High-Intensity Home-Based Walking Exercise on Walk Distance in Patients With Peripheral Artery Disease: The LITE Randomized Clinical Trial. *JAMA - Journal of the American Medical Association*, **2021**, 325, 1266-1276	27.4	39
136	Systemic inflammation, body composition, and physical performance in old community-dwellers. *Journal of Cachexia, Sarcopenia and Muscle*, **2017**, 8, 69-77	10.3	38
135	Patterns of circulating inflammatory biomarkers in older persons with varying levels of physical performance: a partial least squares-discriminant analysis approach. *Frontiers in Medicine*, **2014**, 1, 27	4.9	38
134	Aged mice are unable to mount an effective myeloid response to sepsis. *Journal of Immunology*, **2014**, 192, 612-22	5.3	38
133	Effect of Resveratrol on Walking Performance in Older People With Peripheral Artery Disease: The RESTORE Randomized Clinical Trial. *JAMA Cardiology*, **2017**, 2, 902-907	16.2	37
132	Myeloid-derived suppressor cell function and epigenetic expression evolves over time after surgical sepsis. *Critical Care*, **2019**, 23, 355	10.8	37
131	Loss of sirtuin 1 and mitofusin 2 contributes to enhanced ischemia/reperfusion injury in aged livers. *Aging Cell*, **2018**, 17, e12761	9.9	37
130	A better understanding of why murine models of trauma do not recapitulate the human syndrome. *Critical Care Medicine*, **2014**, 42, 1406-13	1.4	36
129	Expression of key regulators of mitochondrial biogenesis in growth hormone receptor knockout (GHRKO) mice is enhanced but is not further improved by other potential life-extending interventions. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2011**, 66, 1062-76	6.4	34
128	Effects of age and caloric restriction on brain neuronal cell death/survival. *Annals of the New York Academy of Sciences*, **2004**, 1019, 96-105	6.5	34

127	The "BIOmarkers associated with Sarcopenia and PHysical frailty in ElderRly pErsons" (BIOSPHERE) study: Rationale, design and methods. *European Journal of Internal Medicine*, **2018**, 56, 19-25	3.9	33
126	Long-term perturbation of muscle iron homeostasis following hindlimb suspension in old rats is associated with high levels of oxidative stress and impaired recovery from atrophy. *Experimental Gerontology*, **2012**, 47, 100-8	4.5	33
125	Usefulness of preclinical models for assessing the efficacy of late-life interventions for sarcopenia. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2012**, 67, 17-27	6.4	33
124	Glutathone and glutathione ethyl ester supplementation of mice alter glutathione homeostasis during exercise. *Journal of Nutrition*, **1998**, 128, 2420-6	4.1	33
123	Phrenic nerve stimulation increases human diaphragm fiber force after cardiothoracic surgery. *American Journal of Respiratory and Critical Care Medicine*, **2014**, 190, 837-9	10.2	32
122	Oxidative stress and mitochondrial function in skeletal muscle: Effects of aging and exercise training **1998**, 21, 109-17		31
121	Markers of protein oxidation by hydroxyl radical and reactive nitrogen species in tissues of aging rats. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **1998**, 274, R453-61	3.2	31
120	Effects of Long-Term Exercise on Age-Related Hearing Loss in Mice. *Journal of Neuroscience*, **2016**, 36, 11308-11319	6.6	30
119	Oxidized amino acids in the urine of aging rats: potential markers for assessing oxidative stress in vivo. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **1999**, 276, R128-35	3.2	30
118	Effects of dietary calcium restriction and acute exercise on the antioxidant enzyme system and oxidative stress in rat diaphragm. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2004**, 287, R33-8	3.2	29
117	Glycine supplementation extends lifespan of male and female mice. *Aging Cell*, **2019**, 18, e12953	9.9	28
116	Hydrogen sulfide induces oxidative damage to RNA and DNA in a sulfide-tolerant marine invertebrate. *Physiological and Biochemical Zoology*, **2010**, 83, 356-65	2	28
115	Effects of acute exercise on lung antioxidant enzymes in young and old rats. *Mechanisms of Ageing and Development*, **2006**, 127, 384-90	5.6	28
114	Walking performance is positively correlated to calf muscle fiber size in peripheral artery disease subjects, but fibers show aberrant mitophagy: an observational study. *Journal of Translational Medicine*, **2016**, 14, 284	8.5	28
113	Increased TFAM binding to mtDNA damage hot spots is associated with mtDNA loss in aged rat heart. *Free Radical Biology and Medicine*, **2018**, 124, 447-453	7.8	27
112	Increased inflammation but similar physical composition and function in older-aged, HIV-1 infected subjects. *BMC Immunology*, **2015**, 16, 43	3.7	26
111	Low- Versus High-Intensity Plyometric Exercise During Rehabilitation After Anterior Cruciate Ligament Reconstruction. *American Journal of Sports Medicine*, **2016**, 44, 609-17	6.8	26
110	A comparison among the tissue-specific effects of aging and calorie restriction on TFAM amount and TFAM-binding activity to mtDNA in rat. *Biochimica Et Biophysica Acta - General Subjects*, **2014**, 1840, 2184-91	4	26

109	Critical role of autophage in ischemia/reperfusion injury to aged livers. *Autophagy*, **2012**, 8, 140-1	10.2	26
108	Oxidative damage and platelet activation as new predictors of mobility disability and mortality in elders. *Antioxidants and Redox Signaling*, **2006**, 8, 609-19	8.4	26
107	Cocoa to Improve Walking Performance in Older People With Peripheral Artery Disease: The COCOA-PAD Pilot Randomized Clinical Trial. *Circulation Research*, **2020**, 126, 589-599	15.7	25
106	Host responses to sepsis vary in different low-lethality murine models. *PLoS ONE*, **2014**, 9, e94404	3.7	25
105	Vulnerability of the mid aged rat myocardium to the age-induced oxidative stress: influence of exercise training on antioxidant defense system. *Free Radical Research*, **2005**, 39, 1211-7	4	25
104	Intraoperative hemidiaphragm electrical stimulation reduces oxidative stress and upregulates autophagy in surgery patients undergoing mechanical ventilation: exploratory study. *Journal of Translational Medicine*, **2016**, 14, 305	8.5	24
103	Advanced Age Is Associated with Iron Dyshomeostasis and Mitochondrial DNA Damage in Human Skeletal Muscle. *Cells*, **2019**, 8,	7.9	24
102	HDL inflammatory index correlates with and predicts severity of organ failure in patients with sepsis and septic shock. *PLoS ONE*, **2018**, 13, e0203813	3.7	24
101	Lifelong aspirin supplementation as a means to extending life span. *Rejuvenation Research*, **2004**, 7, 243-5	2.6	23
100	Autophagy in the liver: cell? cannibalism and beyond. *Archives of Pharmacal Research*, **2016**, 39, 1050-61	6.1	22
99	Active muscle regeneration following eccentric contraction-induced injury is similar between healthy young and older adults. *Journal of Applied Physiology*, **2014**, 116, 1481-90	3.7	22
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