

# William E Sonntag

## List of Publications by Year in descending order

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203  
papers

12,981  
citations

17440

63  
h-index

30087

103  
g-index

205  
all docs

205  
docs citations

205  
times ranked

13034  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resveratrol confers endothelial protection via activation of the antioxidant transcription factor Nrf2. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 299, H18-H24.	3.2	457
2	Mechanisms of Vascular Aging: New Perspectives. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2010, 65A, 1028-1041.	3.6	429
3	Decreased Pulsatile Release of Growth Hormone in Old Male Rats*. <i>Endocrinology</i> , 1980, 107, 1875-1879.	2.8	300
4	Decreases in Cerebral Microvasculature with Age Are Associated with the Decline in Growth Hormone and Insulin-Like Growth Factor 1*. <i>Endocrinology</i> , 1997, 138, 3515-3520.	2.8	256
5	Obesity in Aging Exacerbates Blood-Brain Barrier Disruption, Neuroinflammation, and Oxidative Stress in the Mouse Hippocampus: Effects on Expression of Genes Involved in Beta-Amyloid Generation and Alzheimer's Disease. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2014, 69, 1212-1226.	3.6	250
6	Vascular oxidative stress in aging: a homeostatic failure due to dysregulation of NRF2-mediated antioxidant response. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 301, H363-H372.	3.2	229
7	Growth hormone and insulin-like growth factor-1 (IGF-1) and their influence on cognitive aging. <i>Ageing Research Reviews</i> , 2005, 4, 195-212.	10.9	226
8	Age-Associated Vascular Oxidative Stress, Nrf2 Dysfunction, and NF- $\kappa$ B Activation in the Nonhuman Primate <i>Macaca mulatta</i> . <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2011, 66A, 866-875.	3.6	194
9	Microvascular plasticity in aging. <i>Ageing Research Reviews</i> , 2003, 2, 149-168.	10.9	191
10	Age-Related Autoregulatory Dysfunction and Cerebromicrovascular Injury in Mice with Angiotensin II-induced Hypertension. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1732-1742.	4.3	183
11	Reduction in the chondrocyte response to insulin-like growth factor 1 in aging and osteoarthritis: Studies in a non-human primate model of naturally occurring disease. <i>Arthritis and Rheumatism</i> , 2000, 43, 2110-2120.	6.7	179
12	Irradiation induces regionally specific alterations in pro-inflammatory environments in rat brain. <i>International Journal of Radiation Biology</i> , 2010, 86, 132-144.	1.8	162
13	Resveratrol treatment rescues neurovascular coupling in aged mice: role of improved cerebromicrovascular endothelial function and downregulation of NADPH oxidase. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 306, H299-H308.	3.2	158
14	Growth hormone, insulin-like growth factor-1 and the aging brain. <i>Experimental Gerontology</i> , 2015, 68, 76-81.	2.8	156
15	Spatial Learning and Memory Deficits after Whole-Brain Irradiation are Associated with Changes in NMDA Receptor Subunits in the Hippocampus. <i>Radiation Research</i> , 2006, 166, 892-899.	1.5	154
16	Caloric restriction and age affect synaptic proteins in hippocampal CA3 and spatial learning ability. <i>Experimental Neurology</i> , 2008, 211, 141-149.	4.1	154
17	A critical analysis of the role of growth hormone and IGF-1 in aging and lifespan. <i>Trends in Genetics</i> , 2002, 18, 295-301.	6.7	152
18	Growth hormone, insulin-like growth factor-1 and the aging cardiovascular system. <i>Cardiovascular Research</i> , 2002, 54, 25-35.	3.8	146

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19	Aging Exacerbates Obesity-induced Cerebromicrovascular Rarefaction, Neurovascular Uncoupling, and Cognitive Decline in Mice. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2014, 69, 1339-1352.	3.6	146
20	Adult-Onset Growth Hormone and Insulin-Like Growth Factor I Deficiency Reduces Neoplastic Disease, Modifies Age-Related Pathology, and Increases Life Span. <i>Endocrinology</i> , 2005, 146, 2920-2932.	2.8	143
21	Sexually divergent induction of microglial-associated neuroinflammation with hippocampal aging. <i>Journal of Neuroinflammation</i> , 2017, 14, 141.	7.2	142
22	Liver-Specific Knockdown of IGF-1 Decreases Vascular Oxidative Stress Resistance by Impairing the Nrf2-Dependent Antioxidant Response: A Novel Model of Vascular Aging. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67A, 313-329.	3.6	140
23	Adaptive induction of NF-E2-related factor-2-driven antioxidant genes in endothelial cells in response to hyperglycemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 300, H1133-H1140.	3.2	138
24	Age-Associated Proinflammatory Secretory Phenotype in Vascular Smooth Muscle Cells From the Non-human Primate <i>Macaca mulatta</i> : Reversal by Resveratrol Treatment. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67, 811-820.	3.6	134
25	Age and insulin-like growth factor-1 modulate N-methyl-D-aspartate receptor subtype expression in rats. <i>Brain Research Bulletin</i> , 2000, 51, 331-338.	3.0	131
26	Caloric restriction confers persistent anti-oxidative, pro-angiogenic, and anti-inflammatory effects and promotes anti-aging miRNA expression profile in cerebromicrovascular endothelial cells of aged rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 307, H292-H306.	3.2	128
27	Treatment with the mitochondrial-targeted antioxidant peptide $\alpha$ 1 rescues neurovascular coupling responses and cerebrovascular endothelial function and improves cognition in aged mice. <i>Aging Cell</i> , 2018, 17, e12731.	6.7	128
28	Aging, Synaptic Dysfunction, and Insulin-Like Growth Factor (IGF)-1. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67A, 611-625.	3.6	124
29	The effects of growth hormone and IGF-1 deficiency on cerebrovascular and brain ageing. <i>Journal of Anatomy</i> , 2000, 197, 575-585.	1.5	122
30	Disruption of Nrf2 Signaling Impairs Angiogenic Capacity of Endothelial Cells: Implications for Microvascular Aging. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67, 821-829.	3.6	122
31	Aging-Induced Dysregulation of Dicer1-Dependent MicroRNA Expression Impairs Angiogenic Capacity of Rat Cerebromicrovascular Endothelial Cells. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2013, 68, 877-891.	3.6	122
32	IGF1 deficiency impairs neurovascular coupling in mice: implications for cerebromicrovascular aging. <i>Aging Cell</i> , 2015, 14, 1034-1044.	6.7	121
33	The effects of growth hormone and IGF-1 deficiency on cerebrovascular and brain ageing. <i>Journal of Anatomy</i> , 2000, 197, 575-585.	1.5	120
34	Hippocampal dysregulation of synaptic plasticity-associated proteins with age-related cognitive decline. <i>Neurobiology of Disease</i> , 2011, 43, 201-212.	4.4	120
35	Insulin-like growth factor receptor signaling regulates working memory, mitochondrial metabolism, and amyloid- $\beta$ uptake in astrocytes. <i>Molecular Metabolism</i> , 2018, 9, 141-155.	6.5	119
36	Aging exacerbates hypertension-induced cerebral microhemorrhages in mice: role of resveratrol treatment in vasoprotection. <i>Aging Cell</i> , 2015, 14, 400-408.	6.7	116

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37	Ionizing Radiation Promotes the Acquisition of a Senescence-Associated Secretory Phenotype and Impairs Angiogenic Capacity in Cerebrovascular Endothelial Cells: Role of Increased DNA Damage and Decreased DNA Repair Capacity in Microvascular Radiosensitivity. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2013, 68, 1443-1457.	3.6	114
38	Ageing Exacerbates Obesity-Induced Oxidative Stress and Inflammation in Perivascular Adipose Tissue in Mice: A Paracrine Mechanism Contributing to Vascular Redox Dysregulation and Inflammation. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2013, 68, 780-792.	3.6	113
39	Concurrent hippocampal induction of MHC II pathway components and glial activation with advanced aging is not correlated with cognitive impairment. <i>Journal of Neuroinflammation</i> , 2011, 8, 138.	7.2	111
40	IGF-1 has sexually dimorphic, pleiotropic, and time-dependent effects on healthspan, pathology, and lifespan. <i>GeroScience</i> , 2017, 39, 129-145.	4.6	111
41	Nrf2 Deficiency Exacerbates Obesity-Induced Oxidative Stress, Neurovascular Dysfunction, Blood-Brain Barrier Disruption, Neuroinflammation, Amyloidogenic Gene Expression, and Cognitive Decline in Mice, Mimicking the Aging Phenotype. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2018, 73, 853-863.	3.6	111
42	Diminished Diurnal Secretion of Adrenocorticotropin (ACTH), But Not Corticosterone, in Old Male Rats: Possible Relation to Increased Adrenal Sensitivity to ACTH <i>in Vivo</i> *. <i>Endocrinology</i> , 1987, 120, 2308-2315.	2.8	109
43	Ageing alters the expression of neurotransmission-regulating proteins in the hippocampal synaptoproteome. <i>Journal of Neurochemistry</i> , 2010, 113, 1577-1588.	3.9	109
44	Pharmacologically-Induced Neurovascular Uncoupling is Associated with Cognitive Impairment in Mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015, 35, 1871-1881.	4.3	105
45	IMPAIRED ABILITY OF OLD MALE RATS TO SECRETE GROWTH HORMONE <i>IN VIVO</i> BUT NOT <i>IN VITRO</i> IN RESPONSE TO hpGRF(1-44). <i>Endocrinology</i> , 1983, 113, 2305-2307.	2.8	101
46	Mitochondrial Protection by Resveratrol. <i>Exercise and Sport Sciences Reviews</i> , 2011, 39, 128-132.	3.0	99
47	Effect of locally delivered IGF-1 on nerve regeneration during aging: An experimental study in rats. <i>Muscle and Nerve</i> , 2010, 41, 335-341.	2.2	98
48	Insulin-like growth factor-1 in CNS and cerebrovascular aging. <i>Frontiers in Aging Neuroscience</i> , 2013, 5, 27.	3.4	98
49	Effects of CNS Active Drugs and Somatostatin Antiserum on Growth Hormone Release in Young and Old Male Rats. <i>Neuroendocrinology</i> , 1981, 33, 73-78.	2.5	91
50	IGF-1 Deficiency Impairs Cerebral Myogenic Autoregulation in Hypertensive Mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 1887-1897.	4.3	90
51	Functional Characterization of Des-IGF-1 Action at Excitatory Synapses in the CA1 Region of Rat Hippocampus. <i>Journal of Neurophysiology</i> , 2005, 94, 247-254.	1.8	89
52	Extreme Longevity Is Associated With Increased Resistance to Oxidative Stress in <i>Arctica islandica</i> , the Longest-Living Non-Colonial Animal. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2011, 66A, 741-750.	3.6	89
53	Role of 20-HETE, TRPC channels, and BK <sub>Ca</sub> in dysregulation of pressure-induced Ca <sup>2+</sup> signaling and myogenic constriction of cerebral arteries in aged hypertensive mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 305, H1698-H1708.	3.2	83
54	Mitochondria and aging in the vascular system. <i>Journal of Molecular Medicine</i> , 2010, 88, 1021-1027.	3.9	82

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55	Growth Hormone-Deficient Dwarf Animals Are Resistant to Dimethylbenzanthracene (DMBA)-Induced Mammary Carcinogenesis. <i>Endocrinology</i> , 2002, 143, 4139-4142.	2.8	81
56	Expression of insulin-like growth factor-1 (IGF-1) and IGF-binding protein 2 (IGF-BP2) in the hippocampus following cytotoxic lesion of the dentate gyrus. <i>Journal of Comparative Neurology</i> , 1996, 369, 388-404.	1.6	80
57	Decreases in Cerebral Microvasculature with Age Are Associated with the Decline in Growth Hormone and Insulin-Like Growth Factor 1. <i>Endocrinology</i> , 1997, 138, 3515-3520.	2.8	80
58	Insulin-like growth factor 1 deficiency exacerbates hypertension-induced cerebral microhemorrhages in mice, mimicking the aging phenotype. <i>Aging Cell</i> , 2017, 16, 469-479.	6.7	78
59	Whole Brain Radiation-Induced Vascular Cognitive Impairment: Mechanisms and Implications. <i>Journal of Vascular Research</i> , 2013, 50, 445-457.	1.4	75
60	Purinergic glio-endothelial coupling during neuronal activity: role of P2Y <sub>1</sub> receptors and eNOS in functional hyperemia in the mouse somatosensory cortex. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 309, H1837-H1845.	3.2	74
61	Effects of chronic growth hormone and insulin-like growth factor 1 deficiency on osteoarthritis severity in rat knee joints. <i>Arthritis and Rheumatism</i> , 2006, 54, 3850-3858.	6.7	73
62	Diverse Roles of Growth Hormone and Insulin-Like Growth Factor-1 in Mammalian Aging: Progress and Controversies. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67A, 587-598.	3.6	72
63	Circulating IGF-1 deficiency exacerbates hypertension-induced microvascular rarefaction in the mouse hippocampus and retrosplenial cortex: implications for cerebrovascular and brain aging. <i>Age</i> , 2016, 38, 273-289.	3.0	70
64	Growth Hormone Replacement Attenuates Diastolic Dysfunction and Cardiac Angiotensin II Expression in Senescent Rats. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2006, 61, 28-35.	3.6	69
65	Irradiation Alters MMP-2/TIMP-2 System and Collagen Type IV Degradation in Brain. <i>International Journal of Radiation Oncology Biology Physics</i> , 2012, 82, 1559-1566.	0.8	69
66	Whole Brain Radiation-Induced Cognitive Impairment: Pathophysiological Mechanisms and Therapeutic Targets. <i>Biomolecules and Therapeutics</i> , 2012, 20, 357-370.	2.4	68
67	Increased secretion of somatostatin-28 from hypothalamic neurons of aged rats in vitro. <i>Brain Research</i> , 1986, 380, 229-234.	2.2	66
68	The GH/IGF-1 axis in a critical period early in life determines cellular DNA repair capacity by altering transcriptional regulation of DNA repair-related genes: implications for the developmental origins of cancer. <i>GeroScience</i> , 2017, 39, 147-160.	4.6	65
69	Insulin-Like Growth Factor-1 Selectively Increases Glucose Utilization in Brains of Aged Animals. <i>Endocrinology</i> , 2001, 142, 506-509.	2.8	64
70	Models of Growth Hormone and IGF-1 Deficiency: Applications to Studies of Aging Processes and Life-Span Determination. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2002, 57, B177-B188.	3.6	63
71	Angiotensin-Converting Enzyme Inhibition, Body Composition, and Physical Performance in Aged Rats. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2004, 59, B416-B423.	3.6	62
72	Age-related decline in peripheral vascular health predicts cognitive impairment. <i>GeroScience</i> , 2019, 41, 125-136.	4.6	62

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73	Pharmacological or genetic depletion of senescent astrocytes prevents whole brain irradiation-induced impairment of neurovascular coupling responses protecting cognitive function in mice. <i>GeroScience</i> , 2020, 42, 409-428.	4.6	62
74	Gender and racial differences in endothelial oxidative stress and inflammation in patients with symptomatic peripheral artery disease. <i>Journal of Vascular Surgery</i> , 2015, 61, 1249-1257.	1.1	61
75	Whole Brain Radiation-Induced Impairments in Learning and Memory Are Time-Sensitive and Reversible by Systemic Hypoxia. <i>PLoS ONE</i> , 2012, 7, e30444.	2.5	61
76	Moderate Caloric Restriction Alters the Subcellular Distribution of Somatostatin mRNA and Increases Growth Hormone Pulse Amplitude in Aged Animals. <i>Neuroendocrinology</i> , 1995, 61, 601-608.	2.5	59
77	Growth Hormone and IGF-1 Deficiency Exacerbate High-Fat Diet-Induced Endothelial Impairment in Obese Lewis Dwarf Rats: Implications for Vascular Aging. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67A, 553-564.	3.6	59
78	Synergistic effects of hypertension and aging on cognitive function and hippocampal expression of genes involved in $\beta$ -amyloid generation and Alzheimer's disease. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 305, H1120-H1130.	3.2	59
79	Aging Exacerbates Pressure-Induced Mitochondrial Oxidative Stress in Mouse Cerebral Arteries: Figure 1.. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2015, 70, 1355-1359.	3.6	59
80	Central IGF-1 protects against features of cognitive and sensorimotor decline with aging in male mice. <i>GeroScience</i> , 2019, 41, 185-208.	4.6	59
81	Adult-onset deficiency in growth hormone and insulin-like growth factor-I decreases survival of dentate granule neurons: Insights into the regulation of adult hippocampal neurogenesis. <i>Journal of Neuroscience Research</i> , 2006, 83, 199-210.	2.9	57
82	Growth, metabolism, and blood pressure disturbances during aging in transgenic rats with altered brain renin-angiotensin systems. <i>Physiological Genomics</i> , 2005, 23, 311-317.	2.3	56
83	Resveratrol Encapsulated in Novel Fusogenic Liposomes Activates Nrf2 and Attenuates Oxidative Stress in Cerebromicrovascular Endothelial Cells From Aged Rats. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2015, 70, 303-313.	3.6	56
84	Impaired Bladder Function in Aging Male Rats. <i>Journal of Urology</i> , 2010, 184, 378-385.	0.4	55
85	Circulating IGF1 regulates hippocampal IGF1 levels and brain gene expression during adolescence. <i>Journal of Endocrinology</i> , 2011, 211, 27-37.	2.6	55
86	Moderate caloric restriction increases type 1 IGF receptors and protein synthesis in aging rats. <i>Mechanisms of Ageing and Development</i> , 1993, 71, 59-71.	4.6	54
87	Treatment with the cytochrome P450 hydroxylase inhibitor HET0016 attenuates cerebrovascular inflammation, oxidative stress and improves vasomotor function in spontaneously hypertensive rats. <i>British Journal of Pharmacology</i> , 2013, 168, 1878-1888.	5.4	54
88	Aging Impairs Myogenic Adaptation to Pulsatile Pressure in Mouse Cerebral Arteries. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015, 35, 527-530.	4.3	54
89	Aging-related kidney damage is associated with a decrease in klotho expression and an increase in superoxide production. <i>Age</i> , 2011, 33, 261-274.	3.0	53
90	Neuroglial Expression of the MHCII Pathway and PirB Receptor Is Upregulated in the Hippocampus with Advanced Aging. <i>Journal of Molecular Neuroscience</i> , 2012, 48, 111-126.	2.3	53

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91	Does senescence give rise to disease?. Mechanisms of Ageing and Development, 2008, 129, 693-699.	4.6	52
92	CNS-wide Sexually Dimorphic Induction of the Major Histocompatibility Complex 1 Pathway With Aging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2017, 72, 16-29.	3.6	52
93	L-Dopa Restores Amplitude of Growth Hormone Pulses in Old Male Rats to That Observed in Young Male Rats. Neuroendocrinology, 1982, 34, 163-168.	2.5	51
94	Effects of moderate caloric restriction on cortical microvascular density and local cerebral blood flow in aged rats. Neurobiology of Aging, 1999, 20, 191-200.	3.1	51
95	How age impairs the response of the neuromuscular junction to nerve transection and repair: An experimental study in rats. Journal of Orthopaedic Research, 2009, 27, 385-393.	2.3	51
96	Cerebral microvascular rarefaction induced by whole brain radiation is reversible by systemic hypoxia in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H736-H744.	3.2	51
97	Testing the Oxidative Stress Hypothesis of Aging in Primate Fibroblasts: Is There a Correlation Between Species Longevity and Cellular ROS Production?. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2012, 67, 841-852.	3.6	51
98	Circulating Factors Induced by Caloric Restriction in the Nonhuman Primate Macaca Mulatta Activate Angiogenic Processes in Endothelial Cells. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2013, 68, 235-249.	3.6	51
99	Chronic ethanol feeding inhibits plasma levels of insulin-like growth factor-1. Life Sciences, 1988, 43, 1325-1330.	4.3	50
100	Growth Hormone Increases Regional Coronary Blood Flow and Capillary Density in Aged Rats. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2001, 56, B364-B371.	3.6	50
101	Increased Pituitary Response to Somatostatin in Aging Male Rats: Relationship to Somatostatin Receptor Number and Affinity. Neuroendocrinology, 1989, 50, 489-494.	2.5	47
102	Aging Reduces Hypoxia-Induced Microvascular Growth in the Rodent Hippocampus. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2008, 63, 12-20.	3.6	47
103	Measuring Behavior in the Home Cage: Study Design, Applications, Challenges, and Perspectives. Frontiers in Behavioral Neuroscience, 2021, 15, 735387.	2.0	46
104	Hippocampal expression of myelin-associated inhibitors is induced with age-related cognitive decline and correlates with deficits of spatial learning and memory. Journal of Neurochemistry, 2012, 121, 77-98.	3.9	45
105	Absence of genomic hypomethylation or regulation of cytosine-modifying enzymes with aging in male and female mice. Epigenetics and Chromatin, 2016, 9, 30.	3.9	45
106	Growth Hormone Releasing Hormone Induced Release of Growth Hormone in Aging Male Rats: Dependence on Pharmacological Manipulation and Endogenous Somatostatin Release. Neuroendocrinology, 1988, 47, 482-488.	2.5	43
107	Vasoprotective Effects of Life Span-Extending Peripubertal GH Replacement in Lewis Dwarf Rats. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2010, 65A, 1145-1156.	3.6	43
108	Hippocampal Subregions Exhibit Both Distinct and Shared Transcriptomic Responses to Aging and Nonneurodegenerative Cognitive Decline. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2014, 69, 1311-1324.	3.6	43

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109	Effect of age and caloric restriction on insulin receptor binding and glucose transporter levels in aging rats. <i>Experimental Gerontology</i> , 1997, 32, 671-684.	2.8	42
110	Recent Developments in Understanding Brain Aging: Implications for Alzheimer's Disease and Vascular Cognitive Impairment. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2016, 71, 13-20.	3.6	42
111	Growth hormone administration to aged animals reduces disulfide glutathione levels in hippocampus. <i>Mechanisms of Ageing and Development</i> , 2006, 127, 57-63.	4.6	41
112	Growth hormone and IGF-I modulate local cerebral glucose utilization and ATP levels in a model of adult-onset growth hormone deficiency. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2006, 291, E604-E610.	3.5	41
113	Impaired Vascular Endothelial Growth Factor A and Inflammation in Patients With Peripheral Artery Disease. <i>Angiology</i> , 2014, 65, 683-690.	1.8	41
114	IGF-1 Regulates Vertebral Bone Aging Through Sex-Specific and Time-Dependent Mechanisms. <i>Journal of Bone and Mineral Research</i> , 2016, 31, 443-454.	2.8	41
115	Free Radical Production, Antioxidant Capacity, and Oxidative Stress Response Signatures in Fibroblasts From Lewis Dwarf Rats: Effects of Life Span-Extending Peripubertal GH Treatment. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2011, 66A, 501-510.	3.6	38
116	Simultaneous assessment of cognitive function, circadian rhythm, and spontaneous activity in aging mice. <i>GeroScience</i> , 2018, 40, 123-137.	4.6	37
117	Accelerated decline in cognition in a mouse model of increased oxidative stress. <i>GeroScience</i> , 2019, 41, 591-607.	4.6	37
118	Age-Related Decline of Autocrine Pituitary Adenylate Cyclase-Activating Polypeptide Impairs Angiogenic Capacity of Rat Cerebromicrovascular Endothelial Cells. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2015, 70, 665-674.	3.6	36
119	IGF-1 deficiency in a critical period early in life influences the vascular aging phenotype in mice by altering miRNA-mediated post-transcriptional gene regulation: implications for the developmental origins of health and disease hypothesis. <i>Age</i> , 2016, 38, 239-258.	3.0	36
120	Aging attenuates radiation-induced expression of pro-inflammatory mediators in rat brain. <i>Neuroscience Letters</i> , 2010, 476, 89-93.	2.1	35
121	Radiation Attenuates Physiological Angiogenesis by Differential Expression of VEGF, Ang-1, Tie-2 and Ang-2 in Rat Brain. <i>Radiation Research</i> , 2011, 176, 753-760.	1.5	35
122	IGF1R signaling regulates astrocyte-mediated neurovascular coupling in mice: implications for brain aging. <i>GeroScience</i> , 2021, 43, 901-911.	4.6	35
123	Decreased Ability of Old Male Rats to Secrete Luteinizing Hormone (LH) Is Not due to Alterations in Pituitary LH-Releasing Hormone Receptors*. <i>Endocrinology</i> , 1984, 114, 1657-1664.	2.8	34
124	Diminished Insulin-like Growth Factor-1 Levels after Chronic Ethanol: Relationship to Pulsatile Growth Hormone Release. <i>Alcoholism: Clinical and Experimental Research</i> , 1989, 13, 3-7.	2.4	34
125	Growth hormone modulates hippocampal excitatory synaptic transmission and plasticity in old rats. <i>Neurobiology of Aging</i> , 2012, 33, 1938-1949.	3.1	34
126	Testing Predictions of the Oxidative Stress Hypothesis of Aging Using a Novel Invertebrate Model of Longevity: The Giant Clam ( <i>Tridacna Derasa</i> ). <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2013, 68, 359-367.	3.6	32



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127	Attenuation of fos-like immunoreactivity induced by a single electroconvulsive shock in brains of aging mice. <i>Brain Research</i> , 1991, 567, 204-211.	2.2	31
128	Adult-onset deficiency in growth hormone and insulin-like growth factor-1 alters oligodendrocyte turnover in the corpus callosum. <i>Glia</i> , 2009, 57, 1062-1071.	4.9	31
129	Aging Exacerbates Microvascular Endothelial Damage Induced by Circulating Factors Present in the Serum of Septic Patients. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2013, 68, 652-660.	3.6	31
130	Greater Endothelial Apoptosis and Oxidative Stress in Patients with Peripheral Artery Disease. <i>International Journal of Vascular Medicine</i> , 2014, 2014, 1-8.	1.0	31
131	Endothelial deficiency of insulin-like growth factor-1 receptor (IGF1R) impairs neurovascular coupling responses in mice, mimicking aspects of the brain aging phenotype. <i>GeroScience</i> , 2021, 43, 2387-2394.	4.6	31
132	Insulin-Like Growth Factor-1 Selectively Increases Glucose Utilization in Brains of Aged Animals. <i>Endocrinology</i> , 2001, 142, 506-509.	2.8	31
133	Effect of Ethanol on Plasma and Hepatic Insulin-Like Growth Factor Regulation in Pregnant Rats. <i>Alcoholism: Clinical and Experimental Research</i> , 1995, 19, 867-873.	2.4	30
134	The ependymal route for insulin-like growth factor-1 gene therapy in the brain. <i>Neuroscience</i> , 2009, 163, 442-447.	2.3	30
135	Basal and hypercapnia-altered cerebrovascular perfusion predict mild cognitive impairment in aging rodents. <i>Neuroscience</i> , 2009, 164, 918-928.	2.3	30
136	Regional changes in CNS and retinal glycerophospholipid profiles with age: a molecular blueprint. <i>Journal of Lipid Research</i> , 2017, 58, 668-680.	4.2	30
137	An assay for RNA oxidation induced abasic sites using the Aldehyde Reactive Probe. <i>Free Radical Research</i> , 2011, 45, 237-247.	3.3	29
138	Age-related alterations in retinal neurovascular and inflammatory transcripts. <i>Molecular Vision</i> , 2011, 17, 1261-74.	1.1	28
139	Suppression by Naloxone of Rise in Plasma Growth Hormone and Prolactin Induced by Suckling. <i>Experimental Biology and Medicine</i> , 1981, 168, 330-333.	2.4	27
140	Stability of local brain levels of insulin-like growth factor-I in two well-characterized models of decreased plasma IGF-I. <i>Growth Factors</i> , 2009, 27, 181-188.	1.7	27
141	Muscarinic receptor/G-protein coupling is reduced in the dorsomedial striatum of cognitively impaired aged rats. <i>Behavioural Brain Research</i> , 2012, 227, 258-264.	2.2	27
142	Resistance to Genotoxic Stresses in <i>Arctica islandica</i> , the Longest Living Noncolonial Animal: Is Extreme Longevity Associated With a Multistress Resistance Phenotype?. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2013, 68, 521-529.	3.6	27
143	Chronic caloric restriction alters muscle membrane fatty acid content. <i>Experimental Gerontology</i> , 2000, 35, 331-341.	2.8	26
144	Increased hippocampal NgR1 signaling machinery in aged rats with deficits of spatial cognition. <i>European Journal of Neuroscience</i> , 2013, 37, 1643-1658.	2.6	23

#	ARTICLE	IF	CITATIONS
145	Systemic influences contribute to prolonged microvascular rarefaction after brain irradiation: a role for endothelial progenitor cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 307, H858-H868.	3.2	22
146	The Protein Tyrosine Phosphatase MEG2 Regulates the Transport and Signal Transduction of Tropomyosin Receptor Kinase A. <i>Journal of Biological Chemistry</i> , 2016, 291, 23895-23905.	3.4	22
147	Sleep deprivation impairs cognitive performance, alters task-associated cerebral blood flow and decreases cortical neurovascular coupling-related hemodynamic responses. <i>Scientific Reports</i> , 2021, 11, 20994.	3.3	22
148	Effects of ovariectomy and steroid replacement on hypothalamic lhrh content in aging female rats. <i>Neurobiology of Aging</i> , 1983, 4, 53-57.	3.1	20
149	Endothelial Cell Inflammation and Antioxidant Capacity are Associated With Exercise Performance and Microcirculation in Patients With Symptomatic Peripheral Artery Disease. <i>Angiology</i> , 2015, 66, 867-874.	1.8	20
150	Role of NADPH oxidase in radiation-induced pro-oxidative and pro-inflammatory pathways in mouse brain. <i>International Journal of Radiation Biology</i> , 2017, 93, 1257-1266.	1.8	20
151	Ethanol Suppresses Growth Hormone-Mediated Cellular Responses in Liver Slices. <i>Alcoholism: Clinical and Experimental Research</i> , 1995, 19, 1246-1251.	2.4	19
152	A Heart That Beats for 500 Years: Age-Related Changes in Cardiac Proteasome Activity, Oxidative Protein Damage and Expression of Heat Shock Proteins, Inflammatory Factors, and Mitochondrial Complexes in <i>Arctica islandica</i> , the Longest-Living Noncolonial Animal. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2014, 69, 1448-1461.	3.6	19
153	Differential effects of IGF-1 deficiency during the life span on structural and biomechanical properties in the tibia of aged mice. <i>Age</i> , 2016, 38, 38.	3.0	19
154	Reproduction in aging normal and neonatally androgenized female rats.. <i>Journal of Comparative and Physiological Psychology</i> , 1980, 94, 556-563.	1.8	18
155	RNA oxidation catalyzed by cytochrome c leads to its depurination and cross-linking, which may facilitate cytochrome c release from mitochondria. <i>Free Radical Biology and Medicine</i> , 2012, 53, 854-862.	2.9	18
156	Expression of NgR1-Antagonizing Proteins Decreases with Aging and Cognitive Decline in Rat Hippocampus. <i>Cellular and Molecular Neurobiology</i> , 2013, 33, 483-488.	3.3	18
157	Endothelin-1-Induced Focal Cerebral Ischemia in the Growth Hormone/IGF-1 Deficient Lewis Dwarf Rat. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2014, 69, 1353-1362.	3.6	18
158	Growth hormone and aging: Regulation, signal transduction and replacement therapy. <i>Trends in Endocrinology and Metabolism</i> , 1996, 7, 145-150.	7.1	17
159	Association between daily walking and antioxidant capacity in patients with symptomatic peripheral artery disease. <i>Journal of Vascular Surgery</i> , 2017, 65, 1762-1768.	1.1	17
160	Distribution of Insulin-Like Growth Factor 1 (IGF-1) and 2 (IGF-2) Receptors in the Hippocampal Formation of Rats and Mice. <i>Advances in Experimental Medicine and Biology</i> , 1991, 293, 449-458.	1.6	17
161	Age-related focal loss of contractile vascular smooth muscle cells in retinal arterioles is accelerated by caveolin-1 deficiency. <i>Neurobiology of Aging</i> , 2018, 71, 1-12.	3.1	16
162	Chemically induced carcinogenesis in rodent models of aging: assessing organismal resilience to genotoxic stressors in geroscience research. <i>GeroScience</i> , 2019, 41, 209-227.	4.6	16

#	ARTICLE	IF	CITATIONS
163	Effects of Short-Term Treadmill Exercise Training or Growth Hormone Supplementation on Diastolic Function and Exercise Tolerance in Old Rats. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2008, 63, 911-920.	3.6	15
164	Interleukin 6 reduces allopregnanolone synthesis in the brain and contributes to age-related cognitive decline in mice. <i>Journal of Lipid Research</i> , 2020, 61, 1308-1319.	4.2	15
165	Bisulfite oligonucleotide-capture sequencing for targeted base- and strand-specific absolute 5-methylcytosine quantitation. <i>Age</i> , 2016, 38, 49.	3.0	14
166	Sleep deprivation alters task-related changes in functional connectivity of the frontal cortex: A near-infrared spectroscopy study. <i>Brain and Behavior</i> , 2021, 11, e02135.	2.2	13
167	Comparison of Protein Synthesis in Brain and Peripheral Tissue during Aging: Relationship to Insulin-like Growth Factor-1 and Type 1 IGF Receptors. <i>Annals of the New York Academy of Sciences</i> , 1993, 692, 253-255.	3.8	12
168	Growth hormone reverses age-related cardiac myofilament dysfunction in rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001, 281, H915-H922.	3.2	11
169	Quantification of oxidized levels of specific RNA species using an aldehyde reactive probe. <i>Analytical Biochemistry</i> , 2011, 417, 142-148.	2.4	11
170	Brain and Cerebrovascular Aging - New Mechanisms and Insights. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2014, 69, 1307-1310.	3.6	11
171	Increased Susceptibility to Cerebral Microhemorrhages Is Associated With Imaging Signs of Microvascular Degeneration in the Retina in an Insulin-Like Growth Factor 1 Deficient Mouse Model of Accelerated Aging. <i>Frontiers in Aging Neuroscience</i> , 2022, 14, 788296.	3.4	11
172	Neuroinvasive <i>Listeria monocytogenes</i> infection triggers accumulation of brain CD8+ tissue-resident memory T cells in a miR-155-dependent fashion. <i>Journal of Neuroinflammation</i> , 2020, 17, 259.	7.2	10
173	Changes in Growth Hormone Secretion in Aging Rats and Man, and Possible Relation to Diminished Physiological Functions. , 1983, , 275-308.		10
174	GeroScience: understanding the interaction of processes of aging and chronic diseases. <i>Age</i> , 2016, 38, 377-378.	3.0	9
175	Plasma growth hormones, P300 event-related potential and test of variables of attention (TOVA) are important neuroendocrinological predictors of early cognitive decline in a clinical setting: Evidence supported by structural equation modeling (SEM) parameter estimates. <i>Age</i> , 2007, 29, 55-67.	3.0	7
176	Age-Related Decreases in Growth Hormone and Insulin-Like Growth Factor (IGF)-1: Implications for Brain Aging. <i>Rejuvenation Research</i> , 2001, 4, 311-329.	0.2	6
177	Influence of diabetes on ambulation and inflammation in men and women with symptomatic peripheral artery disease. <i>Journal of Clinical and Translational Endocrinology</i> , 2015, 2, 137-143.	1.4	6
178	Effects of age and insulin-like growth factor-1 on rat neurotrophin receptor expression after nerve injury. <i>Muscle and Nerve</i> , 2016, 54, 769-775.	2.2	6
179	Endothelial Cell Inflammation and Antioxidant Capacity are Associated With 6-Minute Walk Performance in Patients With Symptomatic Peripheral Artery Disease. <i>Angiology</i> , 2018, 69, 416-423.	1.8	6
180	Insulin-like growth factor-1 does not ameliorate the age-related decline in presumptive inhibitory synapses in layer 2 of rat sensorimotor cortex. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2002, 26, 97-102.	4.8	5

#	ARTICLE	IF	CITATIONS
181	Dendritic stability in a model of adult-onset IGF-I deficiency. Growth Hormone and IGF Research, 2005, 15, 337-348.	1.1	4
182	Of Worms, Flies, Dwarfs, and Things That Go Bump in the Night. Science of Aging Knowledge Environment: SAGE KE, 2002, 2002, 17pe-17.	0.8	3
183	Expression of insulin-like growth factor-1 (IGF-1) and IGF-binding protein 2 (IGF-BP2) in the hippocampus following cytotoxic lesion of the dentate gyrus. , 1996, 369, 388.		2
184	Influence of Ethanol on Functional and Biochemical Characteristics of Skeletal Muscle. , 1991, , 403-423.		2
185	Growth Hormone, Insulin-like Growth Factor- 1, and the Aging Brain. , 2001, , 907-928.		1
186	CELLULAR-MOLECULAR VERSUS NEUROENDOCRINE CONCEPTS OF AGING: A NEED FOR INTEGRATION11The work reported from our laboratory was aided in part by NIH grant no. AGOO416 from the National Institute on Aging. , 1984, , 187-207.		1
187	Growth Hormone and Insulin-like Growth Factor-I and Their Interactions with Brain Circuits Involved in Cognitive Function. , 2006, , 185-208.		0
188	Growth Hormone, Insulin-Like Growth Factor-1, and the Biology of Aging. , 2005, , 534-569.		0
189	Molecular mechanisms of radiation-induced brain injury. FASEB Journal, 2006, 20, A378.	0.5	0
190	Effects of radiation on pro-inflammatory pathways in rat brain. FASEB Journal, 2008, 22, 1003.1.	0.5	0
191	Effects of Aging and Renin-Angiotensin System (RAS) Blockade on the Intra-renal RAS in Older Fischer 344 X Brown Norway Rats. FASEB Journal, 2008, 22, 735.11.	0.5	0
192	Differential regulation of angiogenic factors by radiation in rat brain. FASEB Journal, 2008, 22, 746.2.	0.5	0
193	Aging-Related Renal Damage Is Associated with Decreased Klotho Expression and Increased Superoxide Production. FASEB Journal, 2010, 24, 1059.14.	0.5	0
194	Irradiation induces vessel rarefaction by differential regulation of Ang1, Tie2, Ang2, and VEGF in rat brain. FASEB Journal, 2011, 25, 1001.6.	0.5	0
195	Disruption of Nrf2 signaling impairs angiogenic capacity of endothelial cells: implications for microvascular aging. FASEB Journal, 2012, 26, 682.10.	0.5	0
196	In hypertension CYP450A metabolite 20-HETE exacerbates flow-induced arteriolar constriction and promotes cerebrovascular inflammation. FASEB Journal, 2012, 26, 853.24.	0.5	0
197	Aging exacerbates microvascular endothelial damage induced by inflammatory factors present in the circulation during sepsis. FASEB Journal, 2012, 26, 1058.11.	0.5	0
198	Potential role of NADPH oxidase in radiation-induced pro-oxidative and pro-inflammatory pathways in mouse brain. FASEB Journal, 2012, 26, 692.7.	0.5	0

#	ARTICLE	IF	CITATIONS
199	Bone marrow cells are necessary for cerebral microvascular recovery following whole brain radiation therapy in mice. FASEB Journal, 2012, 26, 682.6.	0.5	0
200	High fat diet-induced obesity promotes cerebrovascular autoregulatory dysfunction in aged mice. FASEB Journal, 2012, 26, 685.30.	0.5	0
201	Selective disruption of IGF-1 signaling in astrocytes impairs neurovascular coupling in mice: implications for cerebrovascular aging. FASEB Journal, 2018, 32, 711.10.	0.5	0
202	Endothelium-specific disruption of IGF-1 signaling impairs blood flow regulation in mice. FASEB Journal, 2019, 33, 684.13.	0.5	0
203	Pharmacological or genetic depletion of senescent astrocytes prevents whole brain irradiation-induced impairment of neurovascular coupling responses protecting cognitive function in mice. FASEB Journal, 2020, 34, 1-1.	0.5	0