Stephen M Roth

List of Publications by Year
in descending order

98 papers	5,681 citations	71102 41 h-index	76900 74 g-index
100 all docs	100 docs citations	100 times ranked	6292 citing authors

#	Article	IF	Citations
1	The Human Gene Map for Performance and Health-Related Fitness Phenotypes. Medicine and Science in Sports and Exercise, 2009, 41, 34-72.	0.4	409
2	The Human Gene Map for Performance and Health-Related Fitness Phenotypes. Medicine and Science in Sports and Exercise, 2006, 38, 1863-1888.	0.4	323
3	Testosterone-induced muscle hypertrophy is associated with an increase in satellite cell number in healthy, young men. American Journal of Physiology - Endocrinology and Metabolism, 2003, 285, E197-E205.	3.5	271
4	Strength Training in the Elderly. Sports Medicine, 2000, 30, 249-268.	6.5	253
5	Relationship between Physical Activity Level, Telomere Length, and Telomerase Activity. Medicine and Science in Sports and Exercise, 2008, 40, 1764-1771.	0.4	188
6	Association of interleukin-15 protein and interleukin-15 receptor genetic variation with resistance exercise training responses. Journal of Applied Physiology, 2004, 97, 2214-2219.	2.5	187
7	The ACTN3 R577X nonsense allele is under-represented in elite-level strength athletes. European Journal of Human Genetics, 2008, 16, 391-394.	2.8	159
8	Myostatin Gene Expression is Reduced in Humans with Heavy-Resistance Strength Training: A Brief Communication. Experimental Biology and Medicine, 2003, 228, 706-709.	2.4	145
9	Alpha-Actinin-3 (ACTN3) R577X Polymorphism Influences Knee Extensor Peak Power Response to Strength Training in Older Men and Women. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2007, 62, 206-212.	3.6	130
10	Skeletal muscle satellite cell populations in healthy young and older men and women. The Anatomical Record, 2000, 260, 351-358.	1.8	128
11	High-volume, heavy-resistance strength training and muscle damage in young and older women. Journal of Applied Physiology, 2000, 88, 1112-1118.	2.5	128
12	Vitamin D Receptor Genotype Is Associated With Fat-Free Mass and Sarcopenia in Elderly Men. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2004, 59, B10-B15.	3.6	126
13	Muscle Size Responses to Strength Training in Young and Older Men and Women. Journal of the American Geriatrics Society, 2001, 49, 1428-1433.	2.6	121
14	<i>ACTN3</i> genotype is associated with muscle phenotypes in women across the adult age span. Journal of Applied Physiology, 2008, 105, 1486-1491.	2.5	116
15	Frequent Sequence Variation in the Human Myostatin (GDF8) Gene as a Marker for Analysis of Muscle-Related Phenotypes. Genomics, 1999, 62, 203-207.	2.9	114
16	Influence of age, sex, and strength training on human muscle gene expression determined by microarray. Physiological Genomics, 2002, 10, 181-190.	2.3	113
17	Advances in Exercise, Fitness, and Performance Genomics. Medicine and Science in Sports and Exercise, 2010, 42, 835-846.	0.4	111
18	Genetic influence on athletic performance. Current Opinion in Pediatrics, 2013, 25, 653-658.	2.0	108

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19	Age and sex affect human muscle fibre adaptations to heavy-resistance strength training. Experimental Physiology, 2006, 91, 457-464.	2.0	107
20	Inflammatory factors in age-related muscle wasting. Current Opinion in Rheumatology, 2006, 18, 625-630.	4.3	96
21	ACE Genotype and the Muscle Hypertrophic and Strength Responses to Strength Training. Medicine and Science in Sports and Exercise, 2008, 40, 677-683.	0.4	96
22	Androgen receptor CAG repeat polymorphism is associated with fat-free mass in men. Journal of Applied Physiology, 2005, 98, 132-137.	2.5	92
23	DNA sequence variation in the promoter region of the<i>VEGF</i>gene impacts<i>VEGF</i>gene expression and maximal oxygen consumption. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H1848-H1855.	3.2	91
24	Exercise, APOE, and working memory: MEG and behavioral evidence for benefit of exercise in epsilon4 carriers. Biological Psychology, 2008, 78, 179-187.	2.2	91
25	Ultrastructural muscle damage in young vs. older men after high-volume, heavy-resistance strength training. Journal of Applied Physiology, 1999, 86, 1833-1840.	2.5	86
26	Muscle strength response to strength training is influenced by insulin-like growth factor 1 genotype in older adults. Journal of Applied Physiology, 2005, 98, 2147-2154.	2.5	86
27	CNTF genotype is associated with muscular strength and quality in humans across the adult age span. Journal of Applied Physiology, 2001, 90, 1205-1210.	2.5	81
28	Circulating microRNAs in acute and chronic exercise: more than mere biomarkers. Journal of Applied Physiology, 2017, 122, 702-717.	2.5	80
29	Sequence variation in hypoxia-inducible factor 1Î± (<i>HIF1A</i>): association with maximal oxygen consumption. Physiological Genomics, 2003, 15, 20-26.	2.3	75
30	Do Telomeres Adapt to Physiological Stress? Exploring the Effect of Exercise on Telomere Length and Telomere-Related Proteins. BioMed Research International, 2013, 2013, 1-15.	1.9	67
31	Association of the ACTN3 Genotype and Physical Functioning With Age in Older Adults. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2008, 63, 1227-1234.	3.6	64
32	Advances in Exercise, Fitness, and Performance Genomics in 2010. Medicine and Science in Sports and Exercise, 2011, 43, 743-752.	0.4	64
33	Chronic Exercise Modifies Age-Related Telomere Dynamics in a Tissue-Specific Fashion. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2012, 67, 911-926.	3.6	64
34	The human gene map for performance and health-related fitness phenotypes: the 2004 update. Medicine and Science in Sports and Exercise, 2005, 37, 881-903.	0.4	63
35	Physical Activity and Telomere Biology: Exploring the Link with Aging-Related Disease Prevention. Journal of Aging Research, 2011, 2011, 1-12.	0.9	59
36	Advances in Exercise, Fitness, and Performance Genomics in 2011. Medicine and Science in Sports and Exercise, 2012, 44, 809-817.	0.4	55

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37	Telomeres Shorten in Response to Oxidative Stress in Mouse Skeletal Muscle Fibers. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2014, 69, 821-830.	3.6	55
38	Advances in Exercise, Fitness, and Performance Genomics in 2015. Medicine and Science in Sports and Exercise, 2016, 48, 1906-1916.	0.4	52
39	Advances in Exercise, Fitness, and Performance Genomics in 2012. Medicine and Science in Sports and Exercise, 2013, 45, 824-831.	0.4	50
40	Insulin-like growth factor-2 genotype, fat-free mass, and muscle performance across the adult life span. Journal of Applied Physiology, 2004, 97, 2176-2183.	2.5	49
41	Myostatin: a therapeutic target for skeletal muscle wasting. Current Opinion in Clinical Nutrition and Metabolic Care, 2004, 7, 259-263.	2.5	42
42	Activin-type II receptor B (ACVR2B) and follistatin haplotype associations with muscle mass and strength in humans. Journal of Applied Physiology, 2007, 102, 2142-2148.	2.5	42
43	Sex-dependent and independent effects of long-term voluntary wheel running on Bdnf mRNA and protein expression. Physiology and Behavior, 2016, 156, 8-15.	2.1	42
44	Acute exercise activates p38 MAPK and increases the expression of telomereâ€protective genes in cardiac muscle. Experimental Physiology, 2017, 102, 397-410.	2.0	42
45	C174T polymorphism in the CNTF receptor gene is associated with fat-free mass in men and women. Journal of Applied Physiology, 2003, 95, 1425-1430.	2.5	41
46	Comprehensive fine mapping of chr12q12-14 and follow-up replication identify activin receptor 1B (ACVR1B) as a muscle strength gene. European Journal of Human Genetics, 2011, 19, 208-215.	2.8	40
47	NFKB1 promoter variation implicates shear-induced NOS3 gene expression and endothelial function in prehypertensives and stage I hypertensives. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2320-H2327.	3.2	39
48	Influence of promoter region variants of insulin-like growth factor pathway genes on the strength-training response of muscle phenotypes in older adults. Journal of Applied Physiology, 2007, 103, 1678-1687.	2.5	39
49	Advances in Exercise, Fitness, and Performance Genomics in 2014. Medicine and Science in Sports and Exercise, 2015, 47, 1105-1112.	0.4	38
50	Interleukin-6 (IL6) Genotype Is Associated With Fat-Free Mass in Men But Not Women. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2003, 58, B1085-B1088.	3.6	37
51	Perspective on the future use of genomics in exercise prescription. Journal of Applied Physiology, 2008, 104, 1243-1245.	2.5	36
52	Blood Pressure Response to Strength Training May Be Influenced by Angiotensinogen Aâ€“20C and Angiotensin II Type I Receptor A1166C Genotypes in Older Men and Women. Journal of the American Geriatrics Society, 2005, 53, 204-210.	2.6	31
53	Genetic aspects of skeletal muscle strength and mass with relevance to sarcopenia. BoneKEy Reports, 2012, 1, 58.	2.7	29
54	Muscle biopsy and muscle fiber hypercontraction: a brief review. European Journal of Applied Physiology, 2000, 83, 239-245.	2.5	28

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55	Hemostatic response to postprandial lipemia before and after exercise training. Journal of Applied Physiology, 2006, 101, 316-321.	2.5	28
56	Replication study of the vitamin D receptor (VDR) genotype association with skeletal muscle traits and sarcopenia. Aging Clinical and Experimental Research, 2016, 28, 435-442.	2.9	28
57	Vitamin D receptorFokIgenotype influences bone mineral density response to strength training, but not aerobic training. Experimental Physiology, 2005, 90, 653-661.	2.0	26
58	Genetic and environmental influences on skeletal muscle phenotypes as a function of age and sex in large, multigenerational families of African heritage. Journal of Applied Physiology, 2007, 103, 1121-1127.	2.5	25
59	Advances in Exercise, Fitness, and Performance Genomics in 2013. Medicine and Science in Sports and Exercise, 2014, 46, 851-859.	0.4	25
60	Critical Overview of Applications of Genetic Testing in Sport Talent Identification. Recent Patents on DNA & Gene Sequences, 2012, 6, 247-255.	0.7	23
61	Exercise alters mRNA expression of telomere-repeat binding factor 1 in skeletal muscle via p38 MAPK. Journal of Applied Physiology, 2012, 113, 1737-1746.	2.5	23
62	<i>TNF</i> promoter polymorphisms associated with muscle phenotypes in humans. Journal of Applied Physiology, 2008, 105, 859-867.	2.5	19
63	AKT1G205T genotype influences obesity-related metabolic phenotypes and their responses to aerobic exercise training in older Caucasians. Experimental Physiology, 2011, 96, 338-347.	2.0	19
64	Interleukin-6 genotype is associated with high-density lipoprotein cholesterol responses to exercise training. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2005, 1734, 143-151.	2.4	18
65	Genetics Primer for Exercise Science and Health. , 2007, , .		18
66	Androgen receptor polyglutamine repeat length affects receptor activity and C2C12 cell development. Physiological Genomics, 2011, 43, 1135-1143.	2.3	15
67	Cardiovascular fitness is associated with altered cortical glucose metabolism during working memory in Îµ4 carriers. Alzheimer's and Dementia, 2012, 8, 352-356.	0.8	15
68	Sexâ€specific effects of exercise ancestry on metabolic, morphological and gene expression phenotypes in multiple generations of mouse offspring. Experimental Physiology, 2013, 98, 1469-1484.	2.0	15
69	Susceptibility genes for gentamicin-induced vestibular dysfunction. Journal of Vestibular Research: Equilibrium and Orientation, 2008, 18, 59-68.	2.0	14
70	Recent Research in the Genetics of Exercise Training Adaptation. Medicine and Sport Science, 2016, 61, 29-40.	1.4	12
71	Lifelong parental voluntary wheel running increases offspring hippocampal Pgc-1Î± mRNA expression but not mitochondrial content or Bdnf expression. NeuroReport, 2015, 26, 467-472.	1.2	10
72	AMPD1 gene polymorphism and the vasodilatory response to ischemia. Life Sciences, 2006, 79, 1413-1418.	4.3	9

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73	Ciliary neurotrophic factor (CNTF) genotype and body composition. European Journal of Human Genetics, 2004, 12, 372-376.	2.8	8
74	MicroRNAs: playing a big role in explaining skeletal muscle adaptation?. Journal of Applied Physiology, 2011, 110, 301-302.	2.5	7
75	Identification of a Novel Mutation Combination in Factor XIII Deficiency: Genetic Update to the First Reported Case in the United States. International Journal of Hematology, 2006, 83, 144-146.	1.6	6
76	Does insulin-like growth factor 1 genotype influence muscle power response to strength training in older men and women?. European Journal of Applied Physiology, 2012, 112, 743-753.	2.5	5
77	Acute forced exercise increases Bdnf IV mRNA and reduces exploratory behavior in C57BL/6J mice. Genes, Brain and Behavior, 2020, 19, e12617.	2.2	5
78	Susceptibility genes for gentamicin-induced vestibular dysfunction. Journal of Vestibular Research: Equilibrium and Orientation, 2008, 18, 59-68.	2.0	5
79	Last Word on Viewpoint: Perspective on the future use of genomics in exercise prescription. Journal of Applied Physiology, 2008, 104, 1254-1254.	2.5	4
80	Systems Exercise Genetics Research Design Standards. Medicine and Science in Sports and Exercise, 2021, 53, 883-887.	0.4	4
81	Independent and combined influence ofAGTR1variants and aerobic exercise on oxidative stress in hypertensives. Blood Pressure, 2009, 18, 204-212.	1.5	3
82	THE ACE ACE ID GENOTYPE AND MUSCLE STRENGTH AND SIZE RESPONSE TO UNILATERAL RESISTANCE TRAINING". Medicine and Science in Sports and Exercise, 2006, 38, 1073.	0.4	2
83	Familial resemblance and shared latent familial variance in recurrent fall risk in older women. Journal of Applied Physiology, 2010, 108, 1142-1147.	2.5	2
84	Why does lactic acid build up in muscles?. Scientific American, 2006, 294, 104.	1.0	2
85	Interpretation of Muscle Damage From Fixed Tissue Obtained by Needle Biopsy. American Journal of Physiology - Endocrinology and Metabolism, 2000, 278, E754-E756.	3.5	1
86	Functional Genomics and the Path to Personalized Medicine. Exercise and Sport Sciences Reviews, 2008, 36, 49-50.	3.0	1
87	Genetic Variation and Skeletal Muscle Traits: Implications for Sarcopenia. , 2011, , 223-257.		1
88	Genetic polymorphisms for BDNF, COMT, and APOE do not affect gait or ankle motor control in chronic stroke: A preliminary cross-sectional study. Topics in Stroke Rehabilitation, 2021, 28, 72-80.	1.9	1
89	Susceptibility genes for gentamicinâ€induced vestibular dysfunction. FASEB Journal, 2007, 21, A415.	0.5	1
90	The effects of vitamin D receptor polymorphisms on bone mineral density in men and women. FASEB Journal, 2007, 21, .	0.5	1

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91	Fundamental Concepts in Exercise Genomics. , 2011, , 1-22.		1
92	PNEUMATIC RESISTANCE MACHINES CAN PROVIDE ECCENTRIC LOADING. Medicine and Science in Sports and Exercise, 2004, 36, 1655.	0.4	0
93	A Synopsis of Exercise Genomics Research and a Vision for its Future Translation into Practice. , 2011, , 231-254.		0
94	The current and future state of sports genomics. , 2021, , 217-233.		0
95	Activin RIIB (ACVR2B) Gene Associations with Muscle Mass and Strength in Humans.. FASEB Journal, 2007, 21, A1205.	0.5	0
96	Telomere Binding Protein mRNA Expression In Response To An Acute Exercise Bout.. Medicine and Science in Sports and Exercise, 2010, 42, 36-37.	0.4	0
97	MAPK signaling is associated with acute exerciseâ€induced changes in mRNA levels of telomereâ€related genes. FASEB Journal, 2011, 25, 1107.18.	0.5	0
98	Effect of Strength Training on Muscle Hypertrophy and Body Composition during Androgen Deprivation Therapy. FASEB Journal, 2011, 25, 1057.6.	0.5	0