Leslie A Leinwand

List of Publications by Year
in descending order

140 papers	10,321 citations	31976 53 h-index	38395 95 g-index
157 all docs	157 docs citations	157 times ranked	12207 citing authors

#	Article	IF	Citations
1	Genes That Escape X Chromosome Inactivation Modulate Sex Differences in Valve Myofibroblasts. Circulation, 2022, 145, 513-530.	1.6	28
2	Burmese pythons exhibit a transient adaptation to nutrient overload that prevents liver damage. Journal of General Physiology, 2022, 154, .	1.9	4
3	Targeting the sarcomere in inherited cardiomyopathies. Nature Reviews Cardiology, 2022, 19, 353-363.	13.7	43
4	Regression from pathological hypertrophy in mice is sexually dimorphic and stimulus specific. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 322, H785-H797.	3.2	7
5	Ablation of lysophosphatidic acid receptor 1 attenuates hypertrophic cardiomyopathy in a mouse model. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	7
6	Associations Between Female Sex, Sarcomere Variants, and Clinical Outcomes in Hypertrophic Cardiomyopathy. Circulation Genomic and Precision Medicine, 2021, 14, e003062.	3.6	38
7	Myosin 7b is a regulatory long noncoding RNA (lncMYH7b) in the human heart. Journal of Biological Chemistry, 2021, 296, 100694.	3.4	11
8	Saliva TwoStep for rapid detection of asymptomatic SARS-CoV-2 carriers. ELife, 2021, 10, .	6.0	37
9	Nuclear mechanosensing drives chromatin remodelling in persistently activated fibroblasts. Nature Biomedical Engineering, 2021, 5, 1485-1499.	22.5	71
10	Just 2% of SARS-CoV-2â^'positive individuals carry 90% of the virus circulating in communities. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	124
11	Identification of sequence changes in myosin II that adjust muscle contraction velocity. PLoS Biology, 2021, 19, e3001248.	5.6	9
12	Cardiac Fibroblasts Mediate a Sexually Dimorphic Fibrotic Response to Î²â€Adrenergic Stimulation. Journal of the American Heart Association, 2021, 10, e018876.	3.7	20
13	Higher Viral Load Drives Infrequent Severe Acute Respiratory Syndrome Coronavirus 2 Transmission Between Asymptomatic Residence Hall Roommates. Journal of Infectious Diseases, 2021, 224, 1316-1324.	4.0	29
14	Nonproductive Splicing Prevents Expression of MYH7b Protein in the Mammalian Heart. Journal of the American Heart Association, 2021, 10, e020965.	3.7	5
15	High-resolution within-sewer SARS-CoV-2 surveillance facilitates informed intervention. Water Research, 2021, 204, 117613.	11.3	38
16	Matters of the heart: Cellular sex differences. Journal of Molecular and Cellular Cardiology, 2021, 160, 42-55.	1.9	40
17	Three-dimensional encapsulation of adult mouse cardiomyocytes in hydrogels with tunable stiffness. Progress in Biophysics and Molecular Biology, 2020, 154, 71-79.	2.9	26
18	Estrogen receptor-Î± in female skeletal muscle is not required for regulation of muscle insulin sensitivity and mitochondrial regulation. Molecular Metabolism, 2020, 34, 1-15.	6.5	21

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19	Defining the Cardiac Fibroblast Secretome in a Fibrotic Microenvironment. Journal of the American Heart Association, 2020, 9, e017025.	3.7	33
20	miR-206 Enforces a Slow Muscle Phenotype. Journal of Cell Science, 2020, 133, .	2.0	16
21	The ATPase cycle of human muscle myosin II isoforms: Adaptation of a single mechanochemical cycle for different physiological roles. Journal of Biological Chemistry, 2019, 294, 14267-14278.	3.4	16
22	Expression of Normally Repressed Myosin Heavy Chain 7b in the Mammalian Heart Induces Dilated Cardiomyopathy. Journal of the American Heart Association, 2019, 8, e013318.	3.7	16
23	Transcatheter aortic valve replacements alter circulating serum factors to mediate myofibroblast deactivation. Science Translational Medicine, 2019, 11, .	12.4	41
24	Myosin motor domains carrying mutations implicated in early or late onset hypertrophic cardiomyopathy have similar properties. Journal of Biological Chemistry, 2019, 294, 17451-17462.	3.4	26
25	PEGâ€“Anthracene Hydrogels as an Onâ€Demand Stiffening Matrix To Study Mechanobiology. Angewandte Chemie, 2019, 131, 10017-10021.	2.0	19
26	PEGâ€“Anthracene Hydrogels as an Onâ€Demand Stiffening Matrix To Study Mechanobiology. Angewandte Chemie - International Edition, 2019, 58, 9912-9916.	13.8	77
27	The ancient sarcomeric myosins found in specialized muscles. Skeletal Muscle, 2019, 9, 7.	4.2	27
28	Differences in microRNA-29 and Pro-fibrotic Gene Expression in Mouse and Human Hypertrophic Cardiomyopathy. Frontiers in Cardiovascular Medicine, 2019, 6, 170.	2.4	26
29	miR-1/206 downregulates splicing factor Srsf9 to promote C2C12 differentiation. Skeletal Muscle, 2019, 9, 31.	4.2	15
30	Dilated cardiomyopathy myosin mutants have reduced force-generating capacity. Journal of Biological Chemistry, 2018, 293, 9017-9029.	3.4	57
31	Pregnancy late in rodent life has detrimental effects on the heart. American Journal of Physiology - Heart and Circulatory Physiology, 2018, 315, H482-H491.	3.2	6
32	Allele-specific differences in transcriptome, miRNome, and mitochondrial function in two hypertrophic cardiomyopathy mouse models. JCI Insight, 2018, 3, .	5.0	33
33	Myoblast replication is reduced in the IUGR fetus despite maintained proliferative capacity in vitro. Journal of Endocrinology, 2017, 232, 475-491.	2.6	32
34	Molecular Mechanisms Underlying Cardiac Adaptation to Exercise. Cell Metabolism, 2017, 25, 1012-1026.	16.2	201
35	Transcriptome and Functional Profile of Cardiac Myocytes Is Influenced by Biological Sex. Circulation: Cardiovascular Genetics, 2017, 10, .	5.1	31
36	Expanding our scientific horizons: utilization of unique model organisms in biological research. EMBO Journal, 2017, 36, 2311-2314.	7.8	9

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37	Letter to the editor: Comments on Stuart et al. (2016): â€œMyosin content of individual human muscle fibers isolated by laser capture microdissectionâ€. American Journal of Physiology - Cell Physiology, 2016, 311, C1048-C1049.	4.6	2
38	Estrogen receptor profiling and activity in cardiac myocytes. Molecular and Cellular Endocrinology, 2016, 431, 62-70.	3.2	55
39	The Importance of Biological Sex and Estrogen in Rodent Models of Cardiovascular Health and Disease. Circulation Research, 2016, 118, 1294-1312.	4.5	145
40	Biology of the cardiac myocyte in heart disease. Molecular Biology of the Cell, 2016, 27, 2149-2160.	2.1	78
41	A small-molecule inhibitor of sarcomere contractility suppresses hypertrophic cardiomyopathy in mice. Science, 2016, 351, 617-621.	12.6	494
42	The Most Prevalent Freeman-Sheldon Syndrome Mutations in the Embryonic Myosin Motor Share Functional Defects. Journal of Biological Chemistry, 2016, 291, 10318-10331.	3.4	34
43	Contractility parameters of human Î²-cardiac myosin with the hypertrophic cardiomyopathy mutation R403Q show loss of motor function. Science Advances, 2015, 1, e1500511.	10.3	102
44	miR-30 Family microRNAs Regulate Myogenic Differentiation and Provide Negative Feedback on the microRNA Pathway. PLoS ONE, 2015, 10, e0118229.	2.5	88
45	Diet and sex modify exercise and cardiac adaptation in the mouse. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H135-H145.	3.2	35
46	Prolonged Cre expression driven by the Î±-myosin heavy chain promoter can be cardiotoxic. Journal of Molecular and Cellular Cardiology, 2015, 86, 54-61.	1.9	90
47	Skip residues modulate the structural properties of the myosin rod and guide thick filament assembly. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3806-15.	7.1	50
48	Developmental myosins: expression patterns and functional significance. Skeletal Muscle, 2015, 5, 22.	4.2	352
49	Spontaneous Aortic Regurgitation and Valvular Cardiomyopathy in Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 1653-1662.	2.4	13
50	Cardiac valve cells and their microenvironmentâ€"insights from in vitro studies. Nature Reviews Cardiology, 2014, 11, 715-727.	13.7	80
51	Metabolic crosstalk between the heart and liver impacts familial hypertrophic cardiomyopathy. EMBO Molecular Medicine, 2014, 6, 482-495.	6.9	34
52	The Python Project: A Unique Model for Extending Research Opportunities to Undergraduate Students. CBE Life Sciences Education, 2014, 13, 698-710.	2.3	21
53	Pregnancy as a cardiac stress model. Cardiovascular Research, 2014, 101, 561-570.	3.8	149
54	The Hypertrophic Cardiomyopathy Myosin Mutation R453C Alters ATP Binding and Hydrolysis of Human Cardiac Î²-Myosin. Journal of Biological Chemistry, 2014, 289, 5158-5167.	3.4	51

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55	Measuring microRNA reporter activity in skeletal muscle using hydrodynamic limb vein injection of plasmid DNA combined with in vivo imaging. Skeletal Muscle, 2013, 3, 19.	4.2	7
56	Molecular consequences of the R453C hypertrophic cardiomyopathy mutation on human Î²-cardiac myosin motor function. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12607-12612.	7.1	144
57	Young at Heart. Cell, 2013, 153, 743-745.	28.9	5
58	Calcineurin activity is required for cardiac remodelling in pregnancy. Cardiovascular Research, 2013, 100, 402-410.	3.8	53
59	The Superfast Human Extraocular Myosin Is Kinetically Distinct from the Fast Skeletal IIa, IIb, and IId Isoforms. Journal of Biological Chemistry, 2013, 288, 27469-27479.	3.4	36
60	Hydrogels preserve native phenotypes of valvular fibroblasts through an elasticity-regulated PI3K/AKT pathway. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19336-19341.	7.1	140
61	Myh7b/miR-499 gene expression is transcriptionally regulated by MRFs and Eos. Nucleic Acids Research, 2012, 40, 7303-7318.	14.5	32
62	Estrogens Mediate Cardiac Hypertrophy in a Stimulus-Dependent Manner. Endocrinology, 2012, 153, 4480-4490.	2.8	46
63	Akt and MAPK signaling mediate pregnancy-induced cardiac adaptation. Journal of Applied Physiology, 2012, 112, 1564-1575.	2.5	80
64	Estrogenic Compounds Are Not Always Cardioprotective and Can Be Lethal in Males with Genetic Heart Disease. Endocrinology, 2012, 153, 4470-4479.	2.8	31
65	Mutations in the Sensitive Giant Titin Result in a Broken Heart. Circulation Research, 2012, 111, 158-161.	4.5	6
66	Myosin filament assembly requires a cluster of four positive residues located in the rod domain. FEBS Letters, 2012, 586, 3008-3012.	2.8	12
67	Effects of Pathogenic Proline Mutations on Myosin Assembly. Journal of Molecular Biology, 2012, 415, 807-818.	4.2	21
68	Interferon-Î³ Causes Cardiac Myocyte Atrophy via Selective Degradation of Myosin Heavy Chain in a Model of Chronic Myocarditis. American Journal of Pathology, 2012, 181, 2038-2046.	3.8	22
69	Distinct Cardiac Transcriptional Profiles Defining Pregnancy and Exercise. PLoS ONE, 2012, 7, e42297.	2.5	33
70	Myosin heavy chain is not selectively decreased in murine cancer cachexia. International Journal of Cancer, 2012, 130, 2722-2727.	5.1	35
71	Identification of functional differences between recombinant human Î± and Î² cardiac myosin motors. Cellular and Molecular Life Sciences, 2012, 69, 2261-2277.	5.4	80
72	Whole transcriptome analysis of the fasting and fed Burmese python heart: insights into extreme physiological cardiac adaptation. Physiological Genomics, 2011, 43, 69-76.	2.3	24

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73	IIb or not IIb? Regulation of myosin heavy chain gene expression in mice and men. Skeletal Muscle, 2011, 1, 5.	4.2	49
74	Fatty Acids Identified in the Burmese Python Promote Beneficial Cardiac Growth. Science, 2011, 334, 528-531.	12.6	120
75	Cancer Causes Cardiac Atrophy and Autophagy in a Sexually Dimorphic Manner. Cancer Research, 2011, 71, 1710-1720.	0.9	173
76	Chemically Tuned Myosin Motors. Science, 2011, 331, 1392-1393.	12.6	7
77	Cellular mechanisms of cardiomyopathy. Journal of Cell Biology, 2011, 194, 355-365.	5.2	308
78	Signaling pathways differ in pregnancy and exerciseâ€induced cardiac hypertrophy. FASEB Journal, 2011, 25, 1059.11.	0.5	0
79	Functional diversity among a family of human skeletal muscle myosin motors. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1053-1058.	7.1	100
80	Estimate of the abundance of cardiomyopathic mutations in the Î²-myosin gene. International Journal of Cardiology, 2010, 144, 124-126.	1.7	6
81	Uncoupling of Expression of an Intronic MicroRNA and Its Myosin Host Gene by Exon Skipping. Molecular and Cellular Biology, 2010, 30, 1937-1945.	2.3	126
82	Morphological and molecular development in python model of pathological cardiac hypertrophy. FASEB Journal, 2010, 24, 1036.3.	0.5	0
83	Mutations in the Î²-myosin rod cause myosin storage myopathy via multiple mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6291-6296.	7.1	46
84	Intrathecal Injection of Naked Plasmid DNA Provides Long-term Expression of Secreted Proteins. Molecular Therapy, 2009, 17, 88-94.	8.2	30
85	Immunogenicity of intrathecal plasmid gene delivery: cytokine release and effects on transgene expression. Journal of Gene Medicine, 2009, 11, 782-790.	2.8	19
86	The role of Akt/GSK-3Î² signaling in familial hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2009, 46, 739-747.	1.9	24
87	Sex-Based Cardiac Physiology. Annual Review of Physiology, 2009, 71, 1-18.	13.1	120
88	Python model of physiological and pathological hypertrophy. FASEB Journal, 2009, 23, .	0.5	0
89	Quantitative responses of the mouse heart to pregnancy. FASEB Journal, 2009, 23, 969.7.	0.5	0
90	Bioinformatics Assessment of Î²-Myosin Mutations Reveals Myosin's High Sensitivity to Mutations. Trends in Cardiovascular Medicine, 2008, 18, 141-149.	4.9	46

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91	Edmund H. Sonnenblick (1932â€"2007). Circulation Research, 2007, 101, 1222-1224.	4.5	0
92	The Effects of Biological Sex and Diet on the Development of Heart Failure. Circulation, 2007, 116, 2747-2759.	1.6	65
93	Molecular Events Underlying Pregnancy-Induced Cardiomyopathy. Cell, 2007, 128, 437-438.	28.9	12
94	Interplay between Exonic Splicing Enhancers, mRNA Processing, and mRNA Surveillance in the Dystrophic Mdx Mouse. PLoS ONE, 2007, 2, e427.	2.5	8
95	Blocking cardiac growth in hypertrophic cardiomyopathy induces cardiac dysfunction and decreased survival only in males. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H838-H845.	3.2	23
96	MyoD, Myf5, and the calcineurin pathway activate the developmental myosin heavy chain genes. Developmental Biology, 2006, 294, 541-553.	2.0	43
97	Repeated intrathecal injections of plasmid DNA encoding interleukin-10 produce prolonged reversal of neuropathic pain. Pain, 2006, 126, 294-308.	4.2	150
98	Diversity in transcriptional start site selection and alternative splicing affects the 5â€²-UTR of mouse striated muscle myosin transcripts. Journal of Muscle Research and Cell Motility, 2006, 27, 559-575.	2.0	9
99	A Î²1-adrenergic receptor CaM kinase II-dependent pathway mediates cardiac myocyte fetal gene induction. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H1299-H1308.	3.2	77
100	Exercise Can Prevent and Reverse the Severity of Hypertrophic Cardiomyopathy. Circulation Research, 2006, 98, 540-548.	4.5	168
101	Shuttling of HDAC5 in H9C2 cells regulates YY1 function through CaMKIV/PKD and PP2A. American Journal of Physiology - Cell Physiology, 2006, 291, C1029-C1037.	4.6	44
102	Soy diet worsens heart disease in mice. Journal of Clinical Investigation, 2005, 116, 209-216.	8.2	76
103	Loaded wheel running and muscle adaptation in the mouse. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H455-H465.	3.2	83
104	Hypertrophy, Fibrosis, and Sudden Cardiac Death in Response to Pathological Stimuli in Mice With Mutations in Cardiac Troponin T. Circulation, 2004, 110, 2102-2109.	1.6	64
105	Valvular Myofibroblast Activation by Transforming Growth Factor-Î². Circulation Research, 2004, 95, 253-260.	4.5	349
106	Morphological and Functional Alterations in Ventricular Myocytes From Male Transgenic Mice With Hypertrophic Cardiomyopathy. Circulation Research, 2004, 94, 201-207.	4.5	42
107	The Ku Protein Complex Interacts with YY1, Is Up-Regulated in Human Heart Failure, and Represses Î± Myosin Heavy-Chain Gene Expression. Molecular and Cellular Biology, 2004, 24, 8705-8715.	2.3	43
108	Sex modifies exercise and cardiac adaptation in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H2768-H2776.	3.2	160

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109	Yin Yang 1 represses Î±-myosin heavy chain gene expression in pathologic cardiac hypertrophy. Biochemical and Biophysical Research Communications, 2004, 326, 79-86.	2.1	22
110	Mechanisms of the Pathogenesis of Troponin T-Based Familial Hypertrophic Cardiomyopathy. Trends in Cardiovascular Medicine, 2003, 13, 232-237.	4.9	7
111	Hope for a Broken Heart?. Cell, 2003, 114, 658-659.	28.9	12
112	Yin Yang 1 Is Increased in Human Heart Failure and Represses the Activity of the Human Î±-Myosin Heavy Chain Promoter. Journal of Biological Chemistry, 2003, 278, 31233-31239.	3.4	76
113	Loss of desmin leads to impaired voluntary wheel running and treadmill exercise performance. Journal of Applied Physiology, 2003, 95, 1617-1622.	2.5	46
114	Sex is a potent modifier of the cardiovascular system. Journal of Clinical Investigation, 2003, 112, 302-307.	8.2	75
115	Sex is a potent modifier of the cardiovascular system. Journal of Clinical Investigation, 2003, 112, 302-307.	8.2	153
116	Genetic variability in forced and voluntary endurance exercise performance in seven inbred mouse strains. Journal of Applied Physiology, 2002, 92, 2245-2255.	2.5	238
117	Postnatal Myosin Heavy Chain Isoform Expression in Normal Mice and Mice Null for IIb or IId Myosin Heavy Chains. Developmental Biology, 2001, 229, 383-395.	2.0	72
118	Progression from hypertrophic to dilated cardiomyopathy in mice that express a mutant myosin transgene. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H151-H159.	3.2	57
119	Mutation of the IIB myosin heavy chain gene results in muscle fiber loss and compensatory hypertrophy. American Journal of Physiology - Cell Physiology, 2001, 280, C637-C645.	4.6	73
120	Cardiac and skeletal muscle adaptations to voluntary wheel running in the mouse. Journal of Applied Physiology, 2001, 90, 1900-1908.	2.5	301
121	Gender and aging in a transgenic mouse model of hypertrophic cardiomyopathy. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H1136-H1144.	3.2	78
122	Different Pathways Regulate Expression of the Skeletal Myosin Heavy Chain Genes. Journal of Biological Chemistry, 2001, 276, 43524-43533.	3.4	128
123	Alterations in cardiac adrenergic signaling and calcium cycling differentially affect the progression of cardiomyopathy. Journal of Clinical Investigation, 2001, 107, 967-974.	8.2	173
124	Myosin Heavy Chain Isoform Expression in the Failing and Nonfailing Human Heart. Circulation Research, 2000, 86, 386-390.	4.5	480
125	Animal models of hypertrophic cardiomyopathy. Current Opinion in Cardiology, 2000, 15, 189-196.	1.8	52
126	Inactivation of myosin heavy chain genes in the mouse: Diverse and unexpected phenotypes. Microscopy Research and Technique, 2000, 50, 492-499.	2.2	26

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127	Expression of the Î² (slow)-isoform of MHC in the adult mouse heart causes dominant-negative functional effects. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 278, H412-H419.	3.2	126
128	Suppression of eukaryotic translation termination by selected RNAs. Rna, 2000, 6, 1468-1479.	3.5	21
129	Enhanced detection of tRNA isoacceptors by combinatorial oligonucleotide hybridization. Rna, 2000, 6, 912-918.	3.5	17
130	Comparative sequence analysis of the complete human sarcomeric myosin heavy chain family: implications for functional diversity 1 1Edited by J. Karn. Journal of Molecular Biology, 1999, 290, 61-75.	4.2	200
131	Spatial and Temporal Changes in Myosin Heavy Chain Gene Expression in Skeletal Muscle Development. Developmental Biology, 1999, 216, 312-326.	2.0	50
132	Cardiac troponin T mutations result in allele-specific phenotypes in a mouse model for hypertrophic cardiomyopathy. Journal of Clinical Investigation, 1999, 104, 469-481.	8.2	213
133	Hypertrophy, Pathology, and Molecular Markers of Cardiac Pathogenesis. Circulation Research, 1998, 82, 773-778.	4.5	114
134	Growth and Muscle Defects in Mice Lacking Adult Myosin Heavy Chain Genes. Journal of Cell Biology, 1997, 139, 1219-1229.	5.2	91
135	A 29 residue region of the sarcomeric myosin rod is necessary for filament formation 1 1Edited by J. Karn. Journal of Molecular Biology, 1997, 266, 317-330.	4.2	159
136	The Vertebrate Myosin Heavy Chain: Genetics and Assembly Properties.. Cell Structure and Function, 1997, 22, 123-129.	1.1	24
137	Mice Expressing Mutant Myosin Heavy Chains Are a Model for Familial Hypertrophic Cardiomyopathy. Molecular Medicine, 1996, 2, 556-567.	4.4	150
138	THE MAMMALIAN MYOSIN HEAVY CHAIN GENE FAMILY. Annual Review of Cell and Developmental Biology, 1996, 12, 417-439.	9.4	313
139	Human cardiac myosin heavy chain genes and their linkage in the genome. Nucleic Acids Research, 1987, 15, 5443-5459.	14.5	164
140	Myosin Myopathies. , 0, , 471-495.		0