Henk L Granzier

List of Publications by Year
in descending order

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186 papers	16,240 citations	12322 69 h-index	17090 122 g-index
189 all docs	189 docs citations	189 times ranked	13036 citing authors

#	Article	IF	Citations
1	Shortening the thick filament by partial deletion of titin's C-zone alters cardiac function by reducing the operating sarcomere length range. Journal of Molecular and Cellular Cardiology, 2022, 165, 103-114.	0.9	2
2	RBM20S639G mutation is a high genetic risk factor for premature death through RNA-protein condensates. Journal of Molecular and Cellular Cardiology, 2022, 165, 115-129.	0.9	14
3	RBM20 phosphorylation and its role in nucleocytoplasmic transport and cardiac pathogenesis. FASEB Journal, 2022, 36, e22302.	0.2	10
4	HDAC6 modulates myofibril stiffness and diastolic function of the heart. Journal of Clinical Investigation, 2022, 132, .	3.9	12
5	MMP inhibitors attenuate doxorubicin cardiotoxicity by preventing intracellular and extracellular matrix remodelling. Cardiovascular Research, 2021, 117, 188-200.	1.8	61
6	Response by Methawasin and Granzier to Letter Regarding Article, â€œPhosphodiesterase 9a Inhibition in Mouse Models of Diastolic Dysfunctionâ€• Circulation: Heart Failure, 2021, 14, e007755.	1.6	0
7	Toward an understanding of myofibrillar function in health and disease. Journal of General Physiology, 2021, 153, .	0.9	1
8	Editorial: Recent Advances on Myocardium Physiology. Frontiers in Physiology, 2021, 12, 697852.	1.3	4
9	Pathogenic variants in TNNC2 cause congenital myopathy due to an impaired force response to calcium. Journal of Clinical Investigation, 2021, 131, .	3.9	11
10	Further progress in understanding of myofibrillar function in health and disease. Journal of General Physiology, 2021, 153, .	0.9	1
11	Muscle ankyrin repeat protein 1 (MARP1) locks titin to the sarcomeric thin filament and is a passive force regulator. Journal of General Physiology, 2021, 153, .	0.9	17
12	Titin M-line insertion sequence 7 is required for proper cardiac function in mice. Journal of Cell Science, 2021, 134, .	1.2	1
13	Muscular changes in animal models of heart failure with preserved ejection fraction: what comes closest to the patient?. ESC Heart Failure, 2021, 8, 139-150.	1.4	17
14	The number of Z-repeats and super-repeats in nebulin greatly varies across vertebrates and scales with animal size. Journal of General Physiology, 2021, 153, .	0.9	7
15	Increased Expression of N2BA Titin Corresponds to More Compliant Myofibrils in Athleteâ€™s Heart. International Journal of Molecular Sciences, 2021, 22, 11110.	1.8	2
16	In vivo characterization of skeletal muscle function in nebulinâ€deficient mice. Muscle and Nerve, 2020, 61, 416-424.	1.0	6
17	Catch a Tiny Fish by the Tail. Biophysical Journal, 2020, 119, 721-723.	0.2	1
18	Nebulin and Lmod2 are critical for specifying thin-filament length in skeletal muscle. Science Advances, 2020, 6, .	4.7	22

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19	Phosphodiesterase 9a Inhibition in Mouse Models of Diastolic Dysfunction. Circulation: Heart Failure, 2020, 13, e006609.	1.6	23
20	Triggering typical nemaline myopathy with compound heterozygous nebulin mutations reveals myofilament structural changes as pathomechanism. Nature Communications, 2020, 11, 2699.	5.8	11
21	Deleting Titinâ€™s C-Terminal PEVK Exons Increases Passive Stiffness, Alters Splicing, and Induces Cross-Sectional and Longitudinal Hypertrophy in Skeletal Muscle. Frontiers in Physiology, 2020, 11, 494.	1.3	8
22	Expressing a Z-disk nebulin fragment in nebulin-deficient mouse muscle: effects on muscle structure and function. Skeletal Muscle, 2020, 10, 2.	1.9	7
23	A new congenital multicore titinopathy associated with fast myosin heavy chain deficiency. Annals of Clinical and Translational Neurology, 2020, 7, 846-854.	1.7	8
24	Single-Molecule Force Spectroscopy on the N2A Element of Titin: Effects of Phosphorylation and CARP. Frontiers in Physiology, 2020, 11, 173.	1.3	16
25	KBTBD13 is an actin-binding protein that modulates muscle kinetics. Journal of Clinical Investigation, 2020, 130, 754-767.	3.9	25
26	Late-life restoration of mitochondrial function reverses cardiac dysfunction in old mice. ELife, 2020, 9, .	2.8	68
27	Omecamtiv mecarbil lowers the contractile deficit in a mouse model of nebulin-based nemaline myopathy. PLoS ONE, 2019, 14, e0224467.	1.1	9
28	Functional Characterization of the Intact Diaphragm in a Nebulin-Based Nemaline Myopathy (NM) Model-Effects of the Fast Skeletal Muscle Troponin Activator tirasemtiv. International Journal of Molecular Sciences, 2019, 20, 5008.	1.8	4
29	Deleting nebulin's C-terminus reveals its importance to sarcomeric structure and function and is sufficient to invoke nemaline myopathy. Human Molecular Genetics, 2019, 28, 1709-1725.	1.4	15
30	Deleting Full Length Titin Versus the Titin M-Band Region Leads to Differential Mechanosignaling and Cardiac Phenotypes. Circulation, 2019, 139, 1813-1827.	1.6	45
31	A missense variant in the titin gene in Doberman pinscher dogs with familial dilated cardiomyopathy and sudden cardiac death. Human Genetics, 2019, 138, 515-524.	1.8	47
32	Osteopontin Promotes Left Ventricular Diastolic Dysfunction Through a Mitochondrial Pathway. Journal of the American College of Cardiology, 2019, 73, 2705-2718.	1.2	41
33	Impairments in contractility and cytoskeletal organisation cause nuclear defects in nemaline myopathy. Acta Neuropathologica, 2019, 138, 477-495.	3.9	25
34	Fine mapping titin's C-zone: Matching cardiac myosin-binding protein C stripes with titin's super-repeats. Journal of Molecular and Cellular Cardiology, 2019, 133, 47-56.	0.9	39
35	Progress on the regulation of myofibrillar function: Part 2. Journal of General Physiology, 2019, 151, 609-609.	0.9	1
36	Diaphragm contractile weakness due to reduced mechanical loading: role of titin. American Journal of Physiology - Cell Physiology, 2019, 317, C167-C176.	2.1	35

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37	Response to: Thick Filament Length Changes in Muscle Have Both Elastic and Structural Components. Biophysical Journal, 2019, 116, 985-986.	0.2	3
38	Titin mutations and muscle disease. Pflugers Archiv European Journal of Physiology, 2019, 471, 673-682.	1.3	42
39	Nebulin and titin modulate cross-bridge cycling and length-dependent calcium sensitivity. Journal of General Physiology, 2019, 151, 680-704.	0.9	32
40	Failure to identify modifiers of NEBULIN related nemaline myopathy in two pre-clinical models of the disease. Biology Open, 2019, 8, .	0.6	4
41	Myostatin Inhibition Using ActRIIB-mFc Does Not Produce Weight Gain or Strength in the Nebulin Conditional KO Mouse. Journal of Neuropathology and Experimental Neurology, 2019, 78, 130-139.	0.9	11
42	Metformin improves diastolic function in an HFpEF-like mouse model by increasing titin compliance. Journal of General Physiology, 2019, 151, 42-52.	0.9	34
43	Sarcomere lengthâ€“dependent effects on Ca2+-troponin regulation in myocardium expressing compliant titin. Journal of General Physiology, 2019, 151, 30-41.	0.9	24
44	Title is missing!. , 2019, 14, e0224467.		0
45	Title is missing!. , 2019, 14, e0224467.		0
46	Title is missing!. , 2019, 14, e0224467.		0
47	Title is missing!. , 2019, 14, e0224467.		0
48	Congenital Titinopathy: Comprehensive characterization and pathogenic insights. Annals of Neurology, 2018, 83, 1105-1124.	2.8	93
49	Histone deacetylase activity governs diastolic dysfunction through a nongenomic mechanism. Science Translational Medicine, 2018, 10, .	5.8	114
50	Positive End-Expiratory Pressure Ventilation Induces Longitudinal Atrophy in Diaphragm Fibers. American Journal of Respiratory and Critical Care Medicine, 2018, 198, 472-485.	2.5	63
51	Downsizing the molecular spring of the giant protein titin reveals that skeletal muscle titin determines passive stiffness and drives longitudinal hypertrophy. ELife, 2018, 7, .	2.8	74
52	Nebulin Stiffens the Thin Filament and Augments Crossbridge Interaction - An X-Ray Diffraction Study on Intact Muscle. Biophysical Journal, 2018, 114, 645a.	0.2	1
53	Thick-Filament Extensibility in Intact SkeletalÂMuscle. Biophysical Journal, 2018, 115, 1580-1588.	0.2	48
54	Nebulin stiffens the thin filament and augments cross-bridge interaction in skeletal muscle. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10369-10374.	3.3	39

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55	Nebulin increases thin filament stiffness and force per cross-bridge in slow-twitch soleus muscle fibers. Journal of General Physiology, 2018, 150, 1510-1522.	0.9	18
56	Titinâ€based mechanosensing modulates muscle hypertrophy. Journal of Cachexia, Sarcopenia and Muscle, 2018, 9, 947-961.	2.9	58
57	Softening the Stressed Giant Titin in Diabetes Mellitus. Circulation Research, 2018, 123, 315-317.	2.0	3
58	Matrix Metalloproteinase Inhibitors Attenuate Doxorubicinâ€Induced Heart Failure by Preventing Cardiac Titin Proteolysis. FASEB Journal, 2018, 32, 864.10.	0.2	0
59	Novex-3, the tiny titin of muscle. Biophysical Reviews, 2017, 9, 201-206.	1.5	16
60	Effect of exercise on passive myocardial stiffness in mice with diastolic dysfunction. Journal of Molecular and Cellular Cardiology, 2017, 108, 24-33.	0.9	19
61	Response by Methawasin and Granzier to Letter Regarding Article, â€œExperimentally Increasing the Compliance of Titin Through RNA Binding Motif-20 (RBM20) Inhibition Improves Diastolic Function in a Mouse Model of Heart Failure With Preserved Ejection Fractionâ€. Circulation, 2017, 135, e681-e682.	1.6	0
62	The giant protein titin regulates the length of the striated muscle thick filament. Nature Communications, 2017, 8, 1041.	5.8	79
63	Muscle weakness in respiratory and peripheral skeletal muscles in a mouse model for nebulin-based nemaline myopathy. Neuromuscular Disorders, 2017, 27, 83-89.	0.3	11
64	A Review of the Giant Protein Titin in Clinical Molecular Diagnostics of Cardiomyopathies. Frontiers in Cardiovascular Medicine, 2016, 3, 21.	1.1	90
65	Increased Titin Compliance Reduced Length-Dependent Contraction and Slowed Cross-Bridge Kinetics in Skinned Myocardial Strips from Rbm20Î”RRM Mice. Frontiers in Physiology, 2016, 7, 322.	1.3	14
66	Sex dimorphisms of crossbridge cycling kinetics in transgenic hypertrophic cardiomyopathy mice. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 311, H125-H136.	1.5	7
67	Renin overexpression leads to increased titin-based stiffness contributing to diastolic dysfunction in hypertensive mRen2 rats. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H1671-H1682.	1.5	24
68	Exploration of pathomechanisms triggered by a single-nucleotide polymorphism in titin's I-band: the cardiomyopathy-linked mutation T2580I. Open Biology, 2016, 6, 160114.	1.5	17
69	Alternative Splicing of Titin Restores Diastolic Function in an HFpEF-Like Genetic Murine Model () Tj ETQq1 1 0.784314 rgBT /Overlock	2.0	31
70	Reducing RBM20 activity improves diastolic dysfunction and cardiac atrophy. Journal of Molecular Medicine, 2016, 94, 1349-1358.	1.7	48
71	Experimentally Increasing the Compliance of Titin Through RNA Binding Motif-20 (RBM20) Inhibition Improves Diastolic Function In a Mouse Model of Heart Failure With Preserved Ejection Fraction. Circulation, 2016, 134, 1085-1099.	1.6	98
72	Thin filament length in the cardiac sarcomere varies with sarcomere length but is independent of titin and nebulin. Journal of Molecular and Cellular Cardiology, 2016, 97, 286-294.	0.9	32

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73	Exome sequencing reveals a nebulin nonsense mutation in a dog model of nemaline myopathy. Mammalian Genome, 2016, 27, 495-502.	1.0	14
74	Mutationâ€s pecific effects on thin filament length in thin filament myopathy. Annals of Neurology, 2016, 79, 959-969.	2.8	54
75	Reduced passive force in skeletal muscles lacking protein arginylation. American Journal of Physiology - Cell Physiology, 2016, 310, C127-C135.	2.1	17
76	Effect of levosimendan on the contractility of muscle fibers from nemaline myopathy patients with mutations in the nebulin gene. Skeletal Muscle, 2015, 5, 12.	1.9	21
77	Phosphorylating Titinâ€™s Cardiac N2B Element by ERK2 or CaMKIIÎ´ Lowers the Single Molecule and Cardiac Muscle Force. Biophysical Journal, 2015, 109, 2592-2601.	0.2	30
78	Role of Titin Missense Variants in Dilated Cardiomyopathy. Journal of the American Heart Association, 2015, 4, .	1.6	64
79	Myocardial Stiffness in Patients With Heart Failure and a Preserved Ejection Fraction. Circulation, 2015, 131, 1247-1259.	1.6	509
80	Reply to Tskhovrebova et al.: Titinâ€™s IA junction does not control thick filament length. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1173-E1173.	3.3	2
81	Myosin light chain phosphorylation to the rescue. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9148-9149.	3.3	9
82	Nebulin deficiency in adult muscle causes sarcomere defects and muscle-type-dependent changes in trophicity: novel insights in nemaline myopathy. Human Molecular Genetics, 2015, 24, 5219-5233.	1.4	53
83	Knockout of Lmod2 results in shorter thin filaments followed by dilated cardiomyopathy and juvenile lethality. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13573-13578.	3.3	70
84	Increased myocardial stiffness due to cardiac titin isoform switching in a mouse model of volume overload limits eccentric remodeling. Journal of Molecular and Cellular Cardiology, 2015, 79, 104-114.	0.9	41
85	Deletion of the titin N2B region accelerates myofibrillar force development but does not alter relaxation kinetics. Journal of Cell Science, 2014, 127, 3666-74.	1.2	19
86	Experimentally Increasing Titin Compliance in a Novel Mouse Model Attenuates the Frank-Starling Mechanism But Has a Beneficial Effect on Diastole. Circulation, 2014, 129, 1924-1936.	1.6	143
87	Protein Changes Contributing to Right Ventricular Cardiomyocyte Diastolic Dysfunction in Pulmonary Arterial Hypertension. Journal of the American Heart Association, 2014, 3, e000716.	1.6	65
88	Cardiac Titin and Heart Disease. Journal of Cardiovascular Pharmacology, 2014, 63, 207-212.	0.8	115
89	Deleting titinâ€™s I-band/A-band junction reveals critical roles for titin in biomechanical sensing and cardiac function. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14589-14594.	3.3	92
90	Effect of exercise training on post-translational and post-transcriptional regulation of titin stiffness in striated muscle of wild type and IG KO mice. Archives of Biochemistry and Biophysics, 2014, 552-553, 100-107.	1.4	38

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91	Tissue Triage and Freezing for Models of Skeletal Muscle Disease. Journal of Visualized Experiments, 2014, , .	0.2	48
92	The multifunctional Ca2+/calmodulin-dependent protein kinase II delta (CaMKIIÎ´) phosphorylates cardiac titin's spring elements. Journal of Molecular and Cellular Cardiology, 2013, 54, 90-97.	0.9	66
93	Tuning the molecular giant titin through phosphorylation: Role in health and disease. Trends in Cardiovascular Medicine, 2013, 23, 165-171.	2.3	99
94	Single Molecule Force Spectroscopy on Titin Implicates Immunoglobulin Domain Stability as a Cardiac Disease Mechanism*. Journal of Biological Chemistry, 2013, 288, 5303-5315.	1.6	38
95	Titin Is a Major Human Disease Gene. Circulation, 2013, 127, 938-944.	1.6	104
96	Calcium sensitivity and myofilament lattice structure in titin N2B KO mice. Archives of Biochemistry and Biophysics, 2013, 535, 76-83.	1.4	19
97	Recessive truncating titin gene, TTN , mutations presenting as centronuclear myopathy. Neurology, 2013, 81, 1205-1214.	1.5	177
98	Sarcomeric dysfunction contributes to muscle weakness in facioscapulohumeral muscular dystrophy. Neurology, 2013, 80, 733-737.	1.5	36
99	Troponin activator augments muscle force in nemaline myopathy patients with nebulin mutations. Journal of Medical Genetics, 2013, 50, 383-392.	1.5	46
100	Shortening of the Elastic Tandem Immunoglobulin Segment of Titin Leads to Diastolic Dysfunction. Circulation, 2013, 128, 19-28.	1.6	95
101	Deleting exon 55 from the nebulin gene induces severe muscle weakness in a mouse model for nemaline myopathy. Brain, 2013, 136, 1718-1731.	3.7	55
102	Fast Skeletal Muscle Troponin Activation Increases Force of Mouse Fast Skeletal Muscle and Ameliorates Weakness Due to Nebulin-Deficiency. PLoS ONE, 2013, 8, e55861.	1.1	25
103	Titin-based stiffening of muscle fibers in Ehlers-Danlos Syndrome. Journal of Applied Physiology, 2012, 112, 1157-1165.	1.2	33
104	A Novel Mechanism Involving Four-and-a-half LIM Domain Protein-1 and Extracellular Signal-regulated Kinase-2 Regulates Titin Phosphorylation and Mechanics. Journal of Biological Chemistry, 2012, 287, 29273-29284.	1.6	89
105	The Sarcomeric Protein Nebulin: Another Multifunctional Giant in Charge of Muscle Strength Optimization. Frontiers in Physiology, 2012, 3, 37.	1.3	30
106	Titin-based tension in the cardiac sarcomere: Molecular origin and physiological adaptations. Progress in Biophysics and Molecular Biology, 2012, 110, 204-217.	1.4	87
107	Thick-Filament Strain and Interfilament Spacing in Passive Muscle: Effect of Titin-Based Passive Tension. Biophysical Journal, 2011, 100, 1499-1508.	0.2	87
108	Mechanics on Myocardium Deficient in the N2B Region of Titin: The Cardiac-Unique Spring Element Improves Efficiency of the Cardiac Cycle. Biophysical Journal, 2011, 101, 1385-1392.	0.2	24

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109	Contribution of titin and extracellular matrix to passive pressure and measurement of sarcomere length in the mouse left ventricle. Journal of Molecular and Cellular Cardiology, 2011, 50, 731-739.	0.9	65
110	The cytoskeleton and the cellular transduction of mechanical strain in the heart: a special issue. Pflugers Archiv European Journal of Physiology, 2011, 462, 1-2.	1.3	2
111	Novel mutations in NEB cause abnormal nebulin expression and markedly impaired muscle force generation in severe nemaline myopathy. Skeletal Muscle, 2011, 1, 23.	1.9	51
112	Hyperphosphorylation of Mouse Cardiac Titin Contributes to Transverse Aortic Constriction-Induced Diastolic Dysfunction. Circulation Research, 2011, 109, 858-866.	2.0	59
113	Mouse intact cardiac myocyte mechanics: cross-bridge and titin-based stress in unactivated cells. Journal of General Physiology, 2011, 137, 81-91.	0.9	73
114	Genetic Variation in Titin in Arrhythmogenic Right Ventricular Cardiomyopathyâ€“Overlap Syndromes. Circulation, 2011, 124, 876-885.	1.6	263
115	Nebulin, a major player in muscle health and disease. FASEB Journal, 2011, 25, 822-829.	0.2	73
116	Cardiac Titin. Circulation, 2010, 121, 2137-2145.	1.6	214
117	Reduced myofibrillar connectivity and increased Z-disk width in nebulin-deficient skeletal muscle. Journal of Cell Science, 2010, 123, 384-391.	1.2	55
118	New Insights into the Structural Roles of Nebulin in Skeletal Muscle. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-6.	3.0	22
119	Modulation of Muscle Atrophy, Fatigue and MLC Phosphorylation by MuRF1 as Indicated by Hindlimb Suspension Studies on MuRF1-KO Mice. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-9.	3.0	90
120	Lifting the Nebula: Novel Insights into Skeletal Muscle Contractility. Physiology, 2010, 25, 304-310.	1.6	21
121	Titin is a Target of Matrix Metalloproteinase-2. Circulation, 2010, 122, 2039-2047.	1.6	177
122	Altered myofilament function depresses force generation in patients with nebulin-based nemaline myopathy (NEM2). Journal of Structural Biology, 2010, 170, 334-343.	1.3	87
123	MuRF1 is a muscle fiber-type II associated factor and together with MuRF2 regulates type-II fiber trophicity and maintenance. Journal of Structural Biology, 2010, 170, 344-353.	1.3	75
124	Differential splicing of the large sarcomeric protein nebulin during skeletal muscle development. Journal of Structural Biology, 2010, 170, 325-333.	1.3	46
125	Calcium sensitivity and the Frankâ€“Starling mechanism of the heart are increased in titin N2B region-deficient mice. Journal of Molecular and Cellular Cardiology, 2010, 49, 449-458.	0.9	46
126	Role of Titin in Skeletal Muscle Function and Disease. Advances in Experimental Medicine and Biology, 2010, 682, 105-122.	0.8	31

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127	Dynamic distribution of muscle-specific calpain in mice has a key role in physical-stress adaptation and is impaired in muscular dystrophy. Journal of Clinical Investigation, 2010, 120, 2672-2683.	3.9	85
128	Single Molecule Force Spectroscopy of the Cardiac Titin N2B Element. Journal of Biological Chemistry, 2009, 284, 13914-13923.	1.6	50
129	Nebulin Alters Cross-bridge Cycling Kinetics and Increases Thin Filament Activation. Journal of Biological Chemistry, 2009, 284, 30889-30896.	1.6	90
130	Thin filament length dysregulation contributes to muscle weakness in nemaline myopathy patients with nebulin deficiency. Human Molecular Genetics, 2009, 18, 2359-2369.	1.4	124
131	Truncation of Titinâ€™s Elastic PEVK Region Leads to Cardiomyopathy With Diastolic Dysfunction. Circulation Research, 2009, 105, 557-564.	2.0	105
132	PKC Phosphorylation of Titinâ€™s PEVK Element. Circulation Research, 2009, 105, 631-638.	2.0	238
133	Stress-induced dilated cardiomyopathy in a knock-in mouse model mimicking human titin-based disease. Journal of Molecular and Cellular Cardiology, 2009, 47, 352-358.	0.9	87
134	Altered Contractility of Skeletal Muscle in Mice Deficient in Titinâ€™s M-Band Region. Journal of Molecular Biology, 2009, 393, 10-26.	2.0	30
135	Tuning Passive Mechanics through Differential Splicing of Titin during Skeletal Muscle Development. Biophysical Journal, 2009, 97, 2277-2286.	0.2	58
136	Sarcoplasmic reticulum calcium uptake and speed of relaxation are depressed in nebulinâ€free skeletal muscle. FASEB Journal, 2008, 22, 2912-2919.	0.2	54
137	Novel role of calpain-3 in the triad-associated protein complex regulating calcium release in skeletal muscle. Human Molecular Genetics, 2008, 17, 3271-3280.	1.4	87
138	Targeted deletion of titin N2B region leads to diastolic dysfunction and cardiac atrophy. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3444-3449.	3.3	155
139	Functional genomics of chicken, mouse, and human titin supports splice diversity as an important mechanism for regulating biomechanics of striated muscle. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R557-R567.	0.9	39
140	Cardiac Hypertrophy and Reduced Contractility in Hearts Deficient in the Titin Kinase Region. Circulation, 2007, 115, 743-751.	1.6	57
141	Hypothyroidism leads to increased collagen-based stiffness and re-expression of large cardiac titin isoforms with high compliance. Journal of Molecular and Cellular Cardiology, 2007, 42, 186-195.	0.9	62
142	Structureâ€“function relations of the giant elastic protein titin in striated and smooth muscle cells. Muscle and Nerve, 2007, 36, 740-755.	1.0	115
143	Expression of Distinct Classes of Titin Isoforms in Striated and Smooth Muscles by Alternative Splicing, and Their Conserved Interaction with Filamins. Journal of Molecular Biology, 2006, 362, 664-681.	2.0	80
144	The Giant Muscle Protein Titin is an Adjustable Molecular Spring. Exercise and Sport Sciences Reviews, 2006, 34, 50-53.	1.6	63

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145	Nebulin regulates thin filament length, contractility, and Z-disk structure in vivo. EMBO Journal, 2006, 25, 3843-3855.	3.5	208
146	Dimerization of the cardiac ankyrin protein CARP: Implications for MARP titin-based signaling. Journal of Muscle Research and Cell Motility, 2006, 26, 401-408.	0.9	49
147	Titin/connectin-based modulation of the Frank-Starling mechanism of the heart. Journal of Muscle Research and Cell Motility, 2006, 26, 319-323.	0.9	66
148	Titin and Diaphragm Dysfunction in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2006, 173, 527-534.	2.5	74
149	Titin-based modulation of active tension and interfilament lattice spacing in skinned rat cardiac muscle. Pflugers Archiv European Journal of Physiology, 2005, 449, 449-457.	1.3	71
150	Titin: Physiological Function and Role in Cardiomyopathy and Failure. Heart Failure Reviews, 2005, 10, 211-223.	1.7	70
151	Phosphorylation of Titin Modulates Passive Stiffness of Cardiac Muscle in a Titin Isoform-dependent Manner. Journal of General Physiology, 2005, 125, 257-271.	0.9	170
152	Titin and Its associated proteins: the third myofilament system of the sarcomere. Advances in Protein Chemistry, 2005, 71, 89-119.	4.4	77
153	MURF-1 and MURF-2 Target a Specific Subset of Myofibrillar Proteins Redundantly: Towards Understanding MURF-dependent Muscle Ubiquitination. Journal of Molecular Biology, 2005, 350, 713-722.	2.0	270
154	Altered Titin Expression, Myocardial Stiffness, and Left Ventricular Function in Patients With Dilated Cardiomyopathy. Circulation, 2004, 110, 155-162.	1.6	436
155	Developmental Control of Titin Isoform Expression and Passive Stiffness in Fetal and Neonatal Myocardium. Circulation Research, 2004, 94, 505-513.	2.0	299
156	Titin isoform-dependent effect of calcium on passive myocardial tension. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H2528-H2534.	1.5	46
157	The Giant Protein Titin. Circulation Research, 2004, 94, 284-295.	2.0	524
158	Induction and Myofibrillar Targeting of CARP, and Suppression of the Nkx2.5 Pathway in the MDM Mouse with Impaired Titin-based Signaling. Journal of Molecular Biology, 2004, 336, 145-154.	2.0	83
159	Role of the Giant Elastic Protein Titin in the Frank-Starling Mechanism of the Heart. Current Vascular Pharmacology, 2004, 2, 135-139.	0.8	41
160	Calcium-dependent molecular spring elements in the giant protein titin. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13716-13721.	3.3	352
161	Titin Isoform Variance and Length Dependence of Activation in Skinned Bovine Cardiac Muscle. Journal of Physiology, 2003, 553, 147-154.	1.3	127
162	The Muscle Ankyrin Repeat Proteins: CARP, ankrd2/Arpp and DARP as a Family of Titin Filament-based Stress Response Molecules. Journal of Molecular Biology, 2003, 333, 951-964.	2.0	296

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163	Conditional Expression of Mutant M-line Titins Results in Cardiomyopathy with Altered Sarcomere Structure. Journal of Biological Chemistry, 2003, 278, 6059-6065.	1.6	118
164	Changes in Titin Isoform Expression in Pacing-Induced Cardiac Failure Give Rise to Increased Passive Muscle Stiffness. Circulation, 2002, 106, 1384-1389.	1.6	152
165	Different Molecular Mechanics Displayed by Titin's Constitutively and Differentially Expressed Tandem Ig Segments. Journal of Structural Biology, 2002, 137, 248-258.	1.3	83
166	Titin: An endosarcomeric protein that modulates myocardial stiffness in DCM. Journal of Cardiac Failure, 2002, 8, S276-S286.	0.7	23
167	Molecular Mechanics of Cardiac Titin's PEVK and N2B Spring Elements. Journal of Biological Chemistry, 2002, 277, 11549-11558.	1.6	141
168	Mutations of TTN, encoding the giant muscle filament titin, cause familial dilated cardiomyopathy. Nature Genetics, 2002, 30, 201-204.	9.4	526
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170	Identification of muscle specific ring finger proteins as potential regulators of the titin kinase domain. Journal of Molecular Biology, 2001, 306, 717-726.	2.0	350
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