

# Henk L Granzier

## List of Publications by Year in descending order

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Version: 2024-02-01

186  
papers

16,240  
citations

12330

69  
h-index

17105

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. <i>Journal of Molecular and Cellular Cardiology</i> , 2022, 165, 103-114.	1.9	2
2	RBM20S639G mutation is a high genetic risk factor for premature death through RNA-protein condensates. <i>Journal of Molecular and Cellular Cardiology</i> , 2022, 165, 115-129.	1.9	14
3	RBM20 phosphorylation and its role in nucleocytoplasmic transport and cardiac pathogenesis. <i>FASEB Journal</i> , 2022, 36, e22302.	0.5	10
4	HDAC6 modulates myofibril stiffness and diastolic function of the heart. <i>Journal of Clinical Investigation</i> , 2022, 132, .	8.2	12
5	MMP inhibitors attenuate doxorubicin cardiotoxicity by preventing intracellular and extracellular matrix remodelling. <i>Cardiovascular Research</i> , 2021, 117, 188-200.	3.8	61
6	Response by Methawasin and Granzier to Letter Regarding Article, "Phosphodiesterase 9a Inhibition in Mouse Models of Diastolic Dysfunction". <i>Circulation: Heart Failure</i> , 2021, 14, e007755.	3.9	0
7	Toward an understanding of myofibrillar function in health and disease. <i>Journal of General Physiology</i> , 2021, 153, .	1.9	1
8	Editorial: Recent Advances on Myocardium Physiology. <i>Frontiers in Physiology</i> , 2021, 12, 697852.	2.8	4
9	Pathogenic variants in TNNC2 cause congenital myopathy due to an impaired force response to calcium. <i>Journal of Clinical Investigation</i> , 2021, 131, .	8.2	11
10	Further progress in understanding of myofibrillar function in health and disease. <i>Journal of General Physiology</i> , 2021, 153, .	1.9	1
11	Muscle ankyrin repeat protein 1 (MARP1) locks titin to the sarcomeric thin filament and is a passive force regulator. <i>Journal of General Physiology</i> , 2021, 153, .	1.9	17
12	Titin M-line insertion sequence 7 is required for proper cardiac function in mice. <i>Journal of Cell Science</i> , 2021, 134, .	2.0	1
13	Muscular changes in animal models of heart failure with preserved ejection fraction: what comes closest to the patient?. <i>ESC Heart Failure</i> , 2021, 8, 139-150.	3.1	17
14	The number of Z-repeats and super-repeats in nebulin greatly varies across vertebrates and scales with animal size. <i>Journal of General Physiology</i> , 2021, 153, .	1.9	7
15	Increased Expression of N2BA Titin Corresponds to More Compliant Myofibrils in Athlete's Heart. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11110.	4.1	2
16	In vivo characterization of skeletal muscle function in nebulin-deficient mice. <i>Muscle and Nerve</i> , 2020, 61, 416-424.	2.2	6
17	Catch a Tiny Fish by the Tail. <i>Biophysical Journal</i> , 2020, 119, 721-723.	0.5	1
18	Nebulin and Lmod2 are critical for specifying thin-filament length in skeletal muscle. <i>Science Advances</i> , 2020, 6, .	10.3	22

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19	Phosphodiesterase 9a Inhibition in Mouse Models of Diastolic Dysfunction. <i>Circulation: Heart Failure</i> , 2020, 13, e006609.	3.9	23
20	Triggering typical nemaline myopathy with compound heterozygous nebulin mutations reveals myofilament structural changes as pathomechanism. <i>Nature Communications</i> , 2020, 11, 2699.	12.8	11
21	Deleting Titin's C-Terminal PEVK Exons Increases Passive Stiffness, Alters Splicing, and Induces Cross-Sectional and Longitudinal Hypertrophy in Skeletal Muscle. <i>Frontiers in Physiology</i> , 2020, 11, 494.	2.8	8
22	Expressing a Z-disk nebulin fragment in nebulin-deficient mouse muscle: effects on muscle structure and function. <i>Skeletal Muscle</i> , 2020, 10, 2.	4.2	7
23	A new congenital multicore titinopathy associated with fast myosin heavy chain deficiency. <i>Annals of Clinical and Translational Neurology</i> , 2020, 7, 846-854.	3.7	8
24	Single-Molecule Force Spectroscopy on the N2A Element of Titin: Effects of Phosphorylation and CARP. <i>Frontiers in Physiology</i> , 2020, 11, 173.	2.8	16
25	KBTBD13 is an actin-binding protein that modulates muscle kinetics. <i>Journal of Clinical Investigation</i> , 2020, 130, 754-767.	8.2	25
26	Late-life restoration of mitochondrial function reverses cardiac dysfunction in old mice. <i>ELife</i> , 2020, 9, .	6.0	68
27	Omecamtiv mecarbil lowers the contractile deficit in a mouse model of nebulin-based nemaline myopathy. <i>PLoS ONE</i> , 2019, 14, e0224467.	2.5	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. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5008.	4.1	4
29	Deleting nebulin's C-terminus reveals its importance to sarcomeric structure and function and is sufficient to invoke nemaline myopathy. <i>Human Molecular Genetics</i> , 2019, 28, 1709-1725.	2.9	15
30	Deleting Full Length Titin Versus the Titin M-Band Region Leads to Differential Mechanosignaling and Cardiac Phenotypes. <i>Circulation</i> , 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. <i>Human Genetics</i> , 2019, 138, 515-524.	3.8	47
32	Osteopontin Promotes Left Ventricular Diastolic Dysfunction Through a Mitochondrial Pathway. <i>Journal of the American College of Cardiology</i> , 2019, 73, 2705-2718.	2.8	41
33	Impairments in contractility and cytoskeletal organisation cause nuclear defects in nemaline myopathy. <i>Acta Neuropathologica</i> , 2019, 138, 477-495.	7.7	25
34	Fine mapping titin's C-zone: Matching cardiac myosin-binding protein C stripes with titin's super-repeats. <i>Journal of Molecular and Cellular Cardiology</i> , 2019, 133, 47-56.	1.9	39
35	Progress on the regulation of myofibrillar function: Part 2. <i>Journal of General Physiology</i> , 2019, 151, 609-609.	1.9	1
36	Diaphragm contractile weakness due to reduced mechanical loading: role of titin. <i>American Journal of Physiology - Cell Physiology</i> , 2019, 317, C167-C176.	4.6	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.	0.5	3
38	Titin mutations and muscle disease. Pflugers Archiv European Journal of Physiology, 2019, 471, 673-682.	2.8	42
39	Nebulin and titin modulate cross-bridge cycling and length-dependent calcium sensitivity. Journal of General Physiology, 2019, 151, 680-704.	1.9	32
40	Failure to identify modifiers of <i>NEBULIN</i> related nemaline myopathy in two pre-clinical models of the disease. Biology Open, 2019, 8, .	1.2	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.	1.7	11
42	Metformin improves diastolic function in an HFpEF-like mouse model by increasing titin compliance. Journal of General Physiology, 2019, 151, 42-52.	1.9	34
43	Sarcomere lengthâ€‘dependent effects on Ca <sup>2+</sup> -troponin regulation in myocardium expressing compliant titin. Journal of General Physiology, 2019, 151, 30-41.	1.9	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.	5.3	93
49	Histone deacetylase activity governs diastolic dysfunction through a nongenomic mechanism. Science Translational Medicine, 2018, 10, .	12.4	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.	5.6	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, .	6.0	74
52	Nebulin Stiffens the Thin Filament and Augments Crossbridge Interaction - An X-Ray Diffraction Study on Intact Muscle. Biophysical Journal, 2018, 114, 645a.	0.5	1
53	Thick-Filament Extensibility in Intact Skeletal Muscle. Biophysical Journal, 2018, 115, 1580-1588.	0.5	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.	7.1	39

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55	Nebulin increases thin filament stiffness and force per cross-bridge in slow-twitch soleus muscle fibers. <i>Journal of General Physiology</i> , 2018, 150, 1510-1522.	1.9	18
56	Titin-based mechanosensing modulates muscle hypertrophy. <i>Journal of Cachexia, Sarcopenia and Muscle</i> , 2018, 9, 947-961.	7.3	58
57	Softening the Stressed Giant Titin in Diabetes Mellitus. <i>Circulation Research</i> , 2018, 123, 315-317.	4.5	3
58	Matrix Metalloproteinase Inhibitors Attenuate Doxorubicin-Induced Heart Failure by Preventing Cardiac Titin Proteolysis. <i>FASEB Journal</i> , 2018, 32, 864.10.	0.5	0
59	Novex-3, the tiny titin of muscle. <i>Biophysical Reviews</i> , 2017, 9, 201-206.	3.2	16
60	Effect of exercise on passive myocardial stiffness in mice with diastolic dysfunction. <i>Journal of Molecular and Cellular Cardiology</i> , 2017, 108, 24-33.	1.9	19
61	Response by Methawasin and Granzier to Letter Regarding Article, "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". <i>Circulation</i> , 2017, 135, e681-e682.	1.6	0
62	The giant protein titin regulates the length of the striated muscle thick filament. <i>Nature Communications</i> , 2017, 8, 1041.	12.8	79
63	Muscle weakness in respiratory and peripheral skeletal muscles in a mouse model for nebulin-based nemaline myopathy. <i>Neuromuscular Disorders</i> , 2017, 27, 83-89.	0.6	11
64	A Review of the Giant Protein Titin in Clinical Molecular Diagnostics of Cardiomyopathies. <i>Frontiers in Cardiovascular Medicine</i> , 2016, 3, 21.	2.4	90
65	Increased Titin Compliance Reduced Length-Dependent Contraction and Slowed Cross-Bridge Kinetics in Skinned Myocardial Strips from Rbm20 <sup>fl</sup> RRM Mice. <i>Frontiers in Physiology</i> , 2016, 7, 322.	2.8	14
66	Sex dimorphisms of crossbridge cycling kinetics in transgenic hypertrophic cardiomyopathy mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 311, H125-H136.	3.2	7
67	Renin overexpression leads to increased titin-based stiffness contributing to diastolic dysfunction in hypertensive mRen2 rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H1671-H1682.	3.2	24
68	Exploration of pathomechanisms triggered by a single-nucleotide polymorphism in titin's I-band: the cardiomyopathy-linked mutation T2580I. <i>Open Biology</i> , 2016, 6, 160114.	3.6	17
69	Alternative Splicing of Titin Restores Diastolic Function in an HFpEF-Like Genetic Murine Model ( ) Tj ETQq1 1 0.784314 rgBT /Overlock 1	4.5	31
70	Reducing RBM20 activity improves diastolic dysfunction and cardiac atrophy. <i>Journal of Molecular Medicine</i> , 2016, 94, 1349-1358.	3.9	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. <i>Circulation</i> , 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. <i>Journal of Molecular and Cellular Cardiology</i> , 2016, 97, 286-294.	1.9	32

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73	Exome sequencing reveals a nebulin nonsense mutation in a dog model of nemaline myopathy. <i>Mammalian Genome</i> , 2016, 27, 495-502.	2.2	14
74	Mutation-specific effects on thin filament length in thin filament myopathy. <i>Annals of Neurology</i> , 2016, 79, 959-969.	5.3	54
75	Reduced passive force in skeletal muscles lacking protein arginylation. <i>American Journal of Physiology - Cell Physiology</i> , 2016, 310, C127-C135.	4.6	17
76	Effect of levosimendan on the contractility of muscle fibers from nemaline myopathy patients with mutations in the nebulin gene. <i>Skeletal Muscle</i> , 2015, 5, 12.	4.2	21
77	Phosphorylating Titin's Cardiac N2B Element by ERK2 or CaMKII $\beta$ Lowers the Single Molecule and Cardiac Muscle Force. <i>Biophysical Journal</i> , 2015, 109, 2592-2601.	0.5	30
78	Role of Titin Missense Variants in Dilated Cardiomyopathy. <i>Journal of the American Heart Association</i> , 2015, 4, .	3.7	64
79	Myocardial Stiffness in Patients With Heart Failure and a Preserved Ejection Fraction. <i>Circulation</i> , 2015, 131, 1247-1259.	1.6	509
80	Reply to Tskhovrebova et al.: Titin's I-A junction does not control thick filament length. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E1173-E1173.	7.1	2
81	Myosin light chain phosphorylation to the rescue. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9148-9149.	7.1	9
82	Nebulin deficiency in adult muscle causes sarcomere defects and muscle-type-dependent changes in trophicity: novel insights in nemaline myopathy. <i>Human Molecular Genetics</i> , 2015, 24, 5219-5233.	2.9	53
83	Knockout of Lmod2 results in shorter thin filaments followed by dilated cardiomyopathy and juvenile lethality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13573-13578.	7.1	70
84	Increased myocardial stiffness due to cardiac titin isoform switching in a mouse model of volume overload limits eccentric remodeling. <i>Journal of Molecular and Cellular Cardiology</i> , 2015, 79, 104-114.	1.9	41
85	Deletion of the titin N2B region accelerates myofibrillar force development but does not alter relaxation kinetics. <i>Journal of Cell Science</i> , 2014, 127, 3666-74.	2.0	19
86	Experimentally Increasing Titin Compliance in a Novel Mouse Model Attenuates the Frank-Starling Mechanism But Has a Beneficial Effect on Diastole. <i>Circulation</i> , 2014, 129, 1924-1936.	1.6	143
87	Protein Changes Contributing to Right Ventricular Cardiomyocyte Diastolic Dysfunction in Pulmonary Arterial Hypertension. <i>Journal of the American Heart Association</i> , 2014, 3, e000716.	3.7	65
88	Cardiac Titin and Heart Disease. <i>Journal of Cardiovascular Pharmacology</i> , 2014, 63, 207-212.	1.9	115
89	Deleting titin's I-band/A-band junction reveals critical roles for titin in biomechanical sensing and cardiac function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 14589-14594.	7.1	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. <i>Archives of Biochemistry and Biophysics</i> , 2014, 552-553, 100-107.	3.0	38

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91	Tissue Triage and Freezing for Models of Skeletal Muscle Disease. Journal of Visualized Experiments, 2014, , .	0.3	48
92	The multifunctional Ca <sup>2+</sup> /calmodulin-dependent protein kinase II delta (CaMKII $\delta$ ) phosphorylates cardiac titin's spring elements. Journal of Molecular and Cellular Cardiology, 2013, 54, 90-97.	1.9	66
93	Tuning the molecular giant titin through phosphorylation: Role in health and disease. Trends in Cardiovascular Medicine, 2013, 23, 165-171.	4.9	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.	3.4	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.	3.0	19
97	Recessive truncating titin gene, <i>TTN</i> , mutations presenting as centronuclear myopathy. Neurology, 2013, 81, 1205-1214.	1.1	177
98	Sarcomeric dysfunction contributes to muscle weakness in facioscapulohumeral muscular dystrophy. Neurology, 2013, 80, 733-737.	1.1	36
99	Troponin activator augments muscle force in nemaline myopathy patients with nebulin mutations. Journal of Medical Genetics, 2013, 50, 383-392.	3.2	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.	7.6	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.	2.5	25
103	Titin-based stiffening of muscle fibers in Ehlers-Danlos Syndrome. Journal of Applied Physiology, 2012, 112, 1157-1165.	2.5	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.	3.4	89
105	The Sarcomeric Protein Nebulin: Another Multifunctional Giant in Charge of Muscle Strength Optimization. Frontiers in Physiology, 2012, 3, 37.	2.8	30
106	Titin-based tension in the cardiac sarcomere: Molecular origin and physiological adaptations. Progress in Biophysics and Molecular Biology, 2012, 110, 204-217.	2.9	87
107	Thick-Filament Strain and Interfilament Spacing in Passive Muscle: Effect of Titin-Based Passive Tension. Biophysical Journal, 2011, 100, 1499-1508.	0.5	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.	0.5	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. <i>Journal of Molecular and Cellular Cardiology</i> , 2011, 50, 731-739.	1.9	65
110	The cytoskeleton and the cellular transduction of mechanical strain in the heart: a special issue. <i>Pflugers Archiv European Journal of Physiology</i> , 2011, 462, 1-2.	2.8	2
111	Novel mutations in NEB cause abnormal nebulin expression and markedly impaired muscle force generation in severe nemaline myopathy. <i>Skeletal Muscle</i> , 2011, 1, 23.	4.2	51
112	Hyperphosphorylation of Mouse Cardiac Titin Contributes to Transverse Aortic Constriction-Induced Diastolic Dysfunction. <i>Circulation Research</i> , 2011, 109, 858-866.	4.5	59
113	Mouse intact cardiac myocyte mechanics: cross-bridge and titin-based stress in unactivated cells. <i>Journal of General Physiology</i> , 2011, 137, 81-91.	1.9	73
114	Genetic Variation in Titin in Arrhythmogenic Right Ventricular Cardiomyopathyâ€œOverlap Syndromes. <i>Circulation</i> , 2011, 124, 876-885.	1.6	263
115	Nebulin, a major player in muscle health and disease. <i>FASEB Journal</i> , 2011, 25, 822-829.	0.5	73
116	Cardiac Titin. <i>Circulation</i> , 2010, 121, 2137-2145.	1.6	214
117	Reduced myofibrillar connectivity and increased Z-disk width in nebulin-deficient skeletal muscle. <i>Journal of Cell Science</i> , 2010, 123, 384-391.	2.0	55
118	New Insights into the Structural Roles of Nebulin in Skeletal Muscle. <i>Journal of Biomedicine and Biotechnology</i> , 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. <i>Journal of Biomedicine and Biotechnology</i> , 2010, 2010, 1-9.	3.0	90
120	Lifting the Nebula: Novel Insights into Skeletal Muscle Contractility. <i>Physiology</i> , 2010, 25, 304-310.	3.1	21
121	Titin is a Target of Matrix Metalloproteinase-2. <i>Circulation</i> , 2010, 122, 2039-2047.	1.6	177
122	Altered myofilament function depresses force generation in patients with nebulin-based nemaline myopathy (NEM2). <i>Journal of Structural Biology</i> , 2010, 170, 334-343.	2.8	87
123	MuRF1 is a muscle fiber-type II associated factor and together with MuRF2 regulates type-II fiber trophicity and maintenance. <i>Journal of Structural Biology</i> , 2010, 170, 344-353.	2.8	75
124	Differential splicing of the large sarcomeric protein nebulin during skeletal muscle development. <i>Journal of Structural Biology</i> , 2010, 170, 325-333.	2.8	46
125	Calcium sensitivity and the Frankâ€œStarling mechanism of the heart are increased in titin N2B region-deficient mice. <i>Journal of Molecular and Cellular Cardiology</i> , 2010, 49, 449-458.	1.9	46
126	Role of Titin in Skeletal Muscle Function and Disease. <i>Advances in Experimental Medicine and Biology</i> , 2010, 682, 105-122.	1.6	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. <i>Journal of Clinical Investigation</i> , 2010, 120, 2672-2683.	8.2	85
128	Single Molecule Force Spectroscopy of the Cardiac Titin N2B Element. <i>Journal of Biological Chemistry</i> , 2009, 284, 13914-13923.	3.4	50
129	Nebulin Alters Cross-bridge Cycling Kinetics and Increases Thin Filament Activation. <i>Journal of Biological Chemistry</i> , 2009, 284, 30889-30896.	3.4	90
130	Thin filament length dysregulation contributes to muscle weakness in nemaline myopathy patients with nebulin deficiency. <i>Human Molecular Genetics</i> , 2009, 18, 2359-2369.	2.9	124
131	Truncation of Titin's Elastic PEVK Region Leads to Cardiomyopathy With Diastolic Dysfunction. <i>Circulation Research</i> , 2009, 105, 557-564.	4.5	105
132	PKC Phosphorylation of Titin's PEVK Element. <i>Circulation Research</i> , 2009, 105, 631-638.	4.5	238
133	Stress-induced dilated cardiomyopathy in a knock-in mouse model mimicking human titin-based disease. <i>Journal of Molecular and Cellular Cardiology</i> , 2009, 47, 352-358.	1.9	87
134	Altered Contractility of Skeletal Muscle in Mice Deficient in Titin's M-Band Region. <i>Journal of Molecular Biology</i> , 2009, 393, 10-26.	4.2	30
135	Tuning Passive Mechanics through Differential Splicing of Titin during Skeletal Muscle Development. <i>Biophysical Journal</i> , 2009, 97, 2277-2286.	0.5	58
136	Sarcoplasmic reticulum calcium uptake and speed of relaxation are depressed in nebulin-free skeletal muscle. <i>FASEB Journal</i> , 2008, 22, 2912-2919.	0.5	54
137	Novel role of calpain-3 in the triad-associated protein complex regulating calcium release in skeletal muscle. <i>Human Molecular Genetics</i> , 2008, 17, 3271-3280.	2.9	87
138	Targeted deletion of titin N2B region leads to diastolic dysfunction and cardiac atrophy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 3444-3449.	7.1	155
139	Functional genomics of chicken, mouse, and human titin supports splice diversity as an important mechanism for regulating biomechanics of striated muscle. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2007, 293, R557-R567.	1.8	39
140	Cardiac Hypertrophy and Reduced Contractility in Hearts Deficient in the Titin Kinase Region. <i>Circulation</i> , 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. <i>Journal of Molecular and Cellular Cardiology</i> , 2007, 42, 186-195.	1.9	62
142	Structure-function relations of the giant elastic protein titin in striated and smooth muscle cells. <i>Muscle and Nerve</i> , 2007, 36, 740-755.	2.2	115
143	Expression of Distinct Classes of Titin Isoforms in Striated and Smooth Muscles by Alternative Splicing, and Their Conserved Interaction with Filamins. <i>Journal of Molecular Biology</i> , 2006, 362, 664-681.	4.2	80
144	The Giant Muscle Protein Titin is an Adjustable Molecular Spring. <i>Exercise and Sport Sciences Reviews</i> , 2006, 34, 50-53.	3.0	63

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145	Nebulin regulates thin filament length, contractility, and Z-disk structure in vivo. EMBO Journal, 2006, 25, 3843-3855.	7.8	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.	2.0	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.	2.0	66
148	Titin and Diaphragm Dysfunction in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2006, 173, 527-534.	5.6	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.	2.8	71
150	Titin: Physiological Function and Role in Cardiomyopathy and Failure. Heart Failure Reviews, 2005, 10, 211-223.	3.9	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.	1.9	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.	4.2	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.	4.5	299
156	Titin isoform-dependent effect of calcium on passive myocardial tension. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H2528-H2534.	3.2	46
157	The Giant Protein Titin. Circulation Research, 2004, 94, 284-295.	4.5	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.	4.2	83
159	Role of the Giant Elastic Protein Titin in the Frank-Starling Mechanism of the Heart. Current Vascular Pharmacology, 2004, 2, 135-139.	1.7	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.	7.1	352
161	Titin Isoform Variance and Length Dependence of Activation in Skinned Bovine Cardiac Muscle. Journal of Physiology, 2003, 553, 147-154.	2.9	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.	4.2	296

#	ARTICLE	IF	CITATIONS
163	Conditional Expression of Mutant M-line Titins Results in Cardiomyopathy with Altered Sarcomere Structure. <i>Journal of Biological Chemistry</i> , 2003, 278, 6059-6065.	3.4	118
164	Changes in Titin Isoform Expression in Pacing-Induced Cardiac Failure Give Rise to Increased Passive Muscle Stiffness. <i>Circulation</i> , 2002, 106, 1384-1389.	1.6	152
165	Different Molecular Mechanics Displayed by Titin's Constitutively and Differentially Expressed Tandem Ig Segments. <i>Journal of Structural Biology</i> , 2002, 137, 248-258.	2.8	83
166	Titin: An endosarcomeric protein that modulates myocardial stiffness in DCM. <i>Journal of Cardiac Failure</i> , 2002, 8, S276-S286.	1.7	23
167	Molecular Mechanics of Cardiac Titin's PEVK and N2B Spring Elements. <i>Journal of Biological Chemistry</i> , 2002, 277, 11549-11558.	3.4	141
168	Mutations of TTN, encoding the giant muscle filament titin, cause familial dilated cardiomyopathy. <i>Nature Genetics</i> , 2002, 30, 201-204.	21.4	526
169	Titin as a modular spring: emerging mechanisms for elasticity control by titin in cardiac physiology and pathophysiology. <i>Journal of Muscle Research and Cell Motility</i> , 2002, 23, 457-470.	2.0	25
170	Identification of muscle specific ring finger proteins as potential regulators of the titin kinase domain. <i>Journal of Molecular Biology</i> , 2001, 306, 717-726.	4.2	350
171	Structural and functional studies of titin's fn3 modules reveal conserved surface patterns and binding to myosin S1 - a possible role in the frank-starling mechanism of the heart. <i>Journal of Molecular Biology</i> , 2001, 313, 431-447.	4.2	91
172	The Complete Gene Sequence of Titin, Expression of an Unusual ~700-kDa Titin Isoform, and Its Interaction With Obscurin Identify a Novel Z-Line to I-Band Linking System. <i>Circulation Research</i> , 2001, 89, 1065-1072.	4.5	593
173	Myopalladin, a Novel 145-Kilodalton Sarcomeric Protein with Multiple Roles in Z-Disc and I-Band Protein Assemblies. <i>Journal of Cell Biology</i> , 2001, 153, 413-428.	5.2	250
174	Titin-Based Modulation of Calcium Sensitivity of Active Tension in Mouse Skinned Cardiac Myocytes. <i>Circulation Research</i> , 2001, 88, 1028-1035.	4.5	224
175	Series of Exon-Skipping Events in the Elastic Spring Region of Titin as the Structural Basis for Myofibrillar Elastic Diversity. <i>Circulation Research</i> , 2000, 86, 1114-1121.	4.5	327
176	Alterations in the Determinants of Diastolic Suction During Pacing Tachycardia. <i>Circulation Research</i> , 2000, 87, 235-240.	4.5	170
177	Changes in Titin and Collagen Underlie Diastolic Stiffness Diversity of Cardiac Muscle. <i>Journal of Molecular and Cellular Cardiology</i> , 2000, 32, 2151-2161.	1.9	198
178	Extensibility of Isoforms of Cardiac Titin: Variation in Contour Length of Molecular Subsegments Provides a Basis for Cellular Passive Stiffness Diversity. <i>Biophysical Journal</i> , 2000, 79, 3226-3234.	0.5	84
179	Acidic and basic troponin T isoforms in mature fast-twitch skeletal muscle and effect on contractility. <i>American Journal of Physiology - Cell Physiology</i> , 1999, 276, C1162-C1170.	4.6	77
180	Characterization of nebulin and nebulin and emerging concepts of their roles for vertebrate Z-discs. <i>Journal of Molecular Biology</i> , 1998, 282, 111-123.	4.2	139

#	ARTICLE	IF	CITATIONS
181	The NH2 Terminus of Titin Spans the Z-Disc: Its Interaction with a Novel 19-kD Ligand (T-cap) Is Required for Sarcomeric Integrity. <i>Journal of Cell Biology</i> , 1998, 143, 1013-1027.	5.2	285
182	Titin Extensibility In Situ: Entropic Elasticity of Permanently Folded and Permanently Unfolded Molecular Segments. <i>Journal of Cell Biology</i> , 1998, 140, 853-859.	5.2	238
183	Folding-Unfolding Transitions in Single Titin Molecules Characterized with Laser Tweezers. <i>Science</i> , 1997, 276, 1112-1116.	12.6	1,147
184	Calcium-dependent inhibition of in vitro thin-filament motility by native titin. <i>FEBS Letters</i> , 1996, 380, 281-286.	2.8	117
185	Titin Develops Restoring Force in Rat Cardiac Myocytes. <i>Circulation Research</i> , 1996, 79, 619-626.	4.5	195
186	The Mechanically Active Domain of Titin in Cardiac Muscle. <i>Circulation Research</i> , 1995, 77, 856-861.	4.5	116