Siegfried Labeit

List of Publications by Year
in descending order

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77 papers	8,724 citations	70961 41 h-index	76769 74 g-index
77 all docs	77 docs citations	77 times ranked	9310 citing authors

#	Article	IF	Citations
1	Cloning of the T gene required in mesoderm formation in the mouse. Nature, 1990, 343, 617-622.	13.7	818
2	The Complete Gene Sequence of Titin, Expression of an Unusual â‰ˆ700-kDa Titin Isoform, and Its Interaction With Obscurin Identify a Novel Z-Line to I-Band Linking System. Circulation Research, 2001, 89, 1065-1072.	2.0	593
3	Mutations of TTN, encoding the giant muscle filament titin, cause familial dilated cardiomyopathy. Nature Genetics, 2002, 30, 201-204.	9.4	526
4	The Giant Protein Titin. Circulation Research, 2004, 94, 284-295.	2.0	524
5	Cardiac myosin binding proteinâ€“C gene splice acceptor site mutation is associated with familial hypertrophic cardiomyopathy. Nature Genetics, 1995, 11, 438-440.	9.4	417
6	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
7	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
8	Series of Exon-Skipping Events in the Elastic Spring Region of Titin as the Structural Basis for Myofibrillar Elastic Diversity. Circulation Research, 2000, 86, 1114-1121.	2.0	327
9	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
10	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
11	Genetic Variation in Titin in Arrhythmogenic Right Ventricular Cardiomyopathyâ€“Overlap Syndromes. Circulation, 2011, 124, 876-885.	1.6	263
12	Myopalladin, a Novel 145-Kilodalton Sarcomeric Protein with Multiple Roles in Z-Disc and I-Band Protein Assemblies. Journal of Cell Biology, 2001, 153, 413-428.	2.3	250
13	Titin Extensibility In Situ: Entropic Elasticity of Permanently Folded and Permanently Unfolded Molecular Segments. Journal of Cell Biology, 1998, 140, 853-859.	2.3	238
14	PKC Phosphorylation of Titinâ€™s PEVK Element. Circulation Research, 2009, 105, 631-638.	2.0	238
15	I-Band Titin in Cardiac Muscle Is a Three-Element Molecular Spring and Is Critical for Maintaining Thin Filament Structure. Journal of Cell Biology, 1999, 146, 631-644.	2.3	228
16	Muscle-specific RING finger-1 interacts with titin to regulate sarcomeric M-line and thick filament structure and may have nuclear functions via its interaction with glucocorticoid modulatory element binding protein-1. Journal of Cell Biology, 2002, 157, 125-136.	2.3	222
17	Diaphragm Muscle Fiber Weakness and Ubiquitinâ€“Proteasome Activation in Critically Ill Patients. American Journal of Respiratory and Critical Care Medicine, 2015, 191, 1126-1138.	2.5	158
18	Cooperative control of striated muscle mass and metabolism by MuRF1 and MuRF2. EMBO Journal, 2008, 27, 350-360.	3.5	148

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19	Molecular Mechanics of Cardiac Titin's PEVK and N2B Spring Elements. Journal of Biological Chemistry, 2002, 277, 11549-11558.	1.6	141
20	Muscle RING-Finger Protein-1 (MuRF1) as a Connector of Muscle Energy Metabolism and Protein Synthesis. Journal of Molecular Biology, 2008, 376, 1224-1236.	2.0	138
21	Specific interaction of the potassium channel Î²-subunit minK with the sarcomeric protein T-cap suggests a T-tubule-myofibril linking system. Journal of Molecular Biology, 2001, 313, 775-784.	2.0	135
22	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
23	ANKRD1, the Gene Encoding Cardiac Ankyrin Repeat Protein, Is a Novel Dilated Cardiomyopathy Gene. Journal of the American College of Cardiology, 2009, 54, 325-333.	1.2	115
24	Molecular determinants for the recruitment of the ubiquitinâ€ligase MuRFâ€1 onto Mâ€line titin. FASEB Journal, 2007, 21, 1383-1392.	0.2	91
25	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
26	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
27	Role of autophagy, SQSTM1, SH3GLB1, and TRIM63 in the turnover of nicotinic acetylcholine receptors. Autophagy, 2014, 10, 123-136.	4.3	86
28	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
29	Induction of MuRF1 Is Essential for TNF-Î±-Induced Loss of Muscle Function in Mice. Journal of Molecular Biology, 2008, 384, 48-59.	2.0	84
30	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
31	A regular pattern of Ig super-motifs defines segmental flexibility as the elastic mechanism of the titin chain. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1186-1191.	3.3	80
32	Titin and Its associated proteins: the third myofilament system of the sarcomere. Advances in Protein Chemistry, 2005, 71, 89-119.	4.4	77
33	MuRF1-dependent Regulation of Systemic Carbohydrate Metabolism as Revealed from Transgenic Mouse Studies. Journal of Molecular Biology, 2008, 379, 666-677.	2.0	76
34	Titin and Diaphragm Dysfunction in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2006, 173, 527-534.	2.5	74
35	Smallâ€molecule inhibition of MuRF1 attenuates skeletal muscle atrophy and dysfunction in cardiac cachexia. Journal of Cachexia, Sarcopenia and Muscle, 2017, 8, 939-953.	2.9	74
36	Tuning Passive Mechanics through Differential Splicing of Titin during Skeletal Muscle Development. Biophysical Journal, 2009, 97, 2277-2286.	0.2	58

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37	Titinâ€based mechanosensing modulates muscle hypertrophy. Journal of Cachexia, Sarcopenia and Muscle, 2018, 9, 947-961.	2.9	58
38	Cardiac Hypertrophy and Reduced Contractility in Hearts Deficient in the Titin Kinase Region. Circulation, 2007, 115, 743-751.	1.6	57
39	Regulation of nicotinic acetylcholine receptor turnover by MuRF1 connects muscle activity to endo/lysosomal and atrophy pathways. Age, 2013, 35, 1663-1674.	3.0	55
40	Titin kinase is an inactive pseudokinase scaffold that supports MuRF1 recruitment to the sarcomeric M-line. Open Biology, 2014, 4, 140041.	1.5	52
41	Single Molecule Force Spectroscopy of the Cardiac Titin N2B Element. Journal of Biological Chemistry, 2009, 284, 13914-13923.	1.6	50
42	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
43	Structural Analysis of B-Box 2 from MuRF1: Identification of a Novel Self-Association Pattern in a RING-like Fold. Biochemistry, 2008, 47, 10722-10730.	1.2	36
44	Anti-titin and Antiryanodine Receptor Antibodies in Myasthenia Gravis Patients with Thymoma. Annals of the New York Academy of Sciences, 1998, 841, 538-541.	1.8	35
45	Smallâ€moleculeâ€mediated chemical knockâ€down of MuRF1/MuRF2 and attenuation of diaphragm dysfunction in chronic heart failure. Journal of Cachexia, Sarcopenia and Muscle, 2019, 10, 1102-1115.	2.9	35
46	ZSF1 rat as animal model for HFpEF: Development of reduced diastolic function and skeletal muscle dysfunction. ESC Heart Failure, 2020, 7, 2123-2134.	1.4	31
47	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
48	Identification of an N-terminal inhibitory extension as the primary mechanosensory regulator of twitchin kinase. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13608-13613.	3.3	25
49	CARP interacts with titin at a unique helical N2A sequence and at the domain Ig81 to form a structured complex. FEBS Letters, 2016, 590, 3098-3110.	1.3	22
50	Titin kinase ubiquitination aligns autophagy receptors with mechanical signals in the sarcomere. EMBO Reports, 2021, 22, e48018.	2.0	22
51	Expression of MuRF1 or MuRF2 is essential for the induction of skeletal muscle atrophy and dysfunction in a murine pulmonary hypertension model. Skeletal Muscle, 2020, 10, 12.	1.9	20
52	Targeting MuRF1 by small molecules in a HFpEF rat model improves myocardial diastolic function and skeletal muscle contractility. Journal of Cachexia, Sarcopenia and Muscle, 2022, 13, 1565-1581.	2.9	20
53	Molecular mechanisms behind progressing chronic inflammatory dilated cardiomyopathy. BMC Cardiovascular Disorders, 2015, 15, 26.	0.7	18
54	MuRFs Specialized Members of the TRIM/RBCC Family with Roles in the Regulation of the Trophic State of Muscle and Its Metabolism. Advances in Experimental Medicine and Biology, 2012, 770, 119-129.	0.8	18

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55	Molecular basis for the fold organization and sarcomeric targeting of the muscle atrogin MuRF1. Open Biology, 2014, 4, 130172.	1.5	17
56	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
57	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
58	Small-Molecule Chemical Knockdown of MuRF1 in Melanoma Bearing Mice Attenuates Tumor Cachexia Associated Myopathy. Cells, 2020, 9, 2272.	1.8	15
59	FoxO3a suppression and VPS34 activity are essential to anti-atrophic effects of leucine in skeletal muscle. Cell and Tissue Research, 2017, 369, 381-394.	1.5	14
60	In silico Prediction of miRNA Interactions With Candidate Atherosclerosis Gene mRNAs. Frontiers in Genetics, 2020, 11, 605054.	1.1	13
61	Cardiac specific titin N2B exon is a novel sensitive serological marker for cardiac injury. International Journal of Cardiology, 2016, 212, 232-234.	0.8	11
62	Dysregulated IER3 Expression is Associated with Enhanced Apoptosis in Titin-Based Dilated Cardiomyopathy. International Journal of Molecular Sciences, 2017, 18, 723.	1.8	11
63	Regulation of Glucose Metabolism by MuRF1 and Treatment of Myopathy in Diabetic Mice with Small Molecules Targeting MuRF1. International Journal of Molecular Sciences, 2021, 22, 2225.	1.8	10
64	Emerging Strategies Targeting Catabolic Muscle Stress Relief. International Journal of Molecular Sciences, 2020, 21, 4681.	1.8	9
65	Titin Transcripts in Thymomas. Annals of the New York Academy of Sciences, 1998, 841, 422-426.	1.8	8
66	Screening for anti-titin antibodies in patients with various paraneoplastic neurological syndromes. Journal of Neuroimmunology, 2016, 295-296, 18-20.	1.1	7
67	Cardiomyogenic Differentiation Potential of Human Dilated Myocardium-Derived Mesenchymal Stem/Stromal Cells: The Impact of HDAC Inhibitor SAHA and Biomimetic Matrices. International Journal of Molecular Sciences, 2021, 22, 12702.	1.8	7
68	MuRF1 and MuRF2 are key players in skeletal muscle regeneration involving myogenic deficit and deregulation of the chromatinâ€remodeling complex. JCSM Rapid Communications, 2019, 2, 1-25.	0.6	6
69	The E3 ligase MuRF2 plays a key role in the functional capacity of skeletal muscle fibroblasts. Brazilian Journal of Medical and Biological Research, 2019, 52, e8551.	0.7	6
70	Identification of Bovine miRNAs with the Potential to Affect Human Gene Expression. Frontiers in Genetics, 2021, 12, 705350.	1.1	6
71	Histone Deacetylase Inhibitor Suberoylanilide Hydroxamic Acid Improves Energetic Status and Cardiomyogenic Differentiation of Human Dilated Myocardium-Derived Primary Mesenchymal Cells. International Journal of Molecular Sciences, 2020, 21, 4845.	1.8	5
72	MuRF1 deficiency prevents ageâ€related fat weight gain, possibly through accumulation of PDK4 in skeletal muscle mitochondria in older mice. Journal of Orthopaedic Research, 2022, 40, 1026-1038.	1.2	5

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73	Leucine Supplementation Decreases HDAC4 Expression and Nuclear Localization in Skeletal Muscle Fiber of Rats Submitted to Hindlimb Immobilization. Cells, 2020, 9, 2582.	1.8	4
74	miR-29c Increases Protein Synthesis in Skeletal Muscle Independently of AKT/mTOR. International Journal of Molecular Sciences, 2022, 23, 7198.	1.8	4
75	CHARACTERISTICS OF miRNA INTERACTION WITH mRNA OF ISCHEMIC HEART DISEASE CANDIDATE GENES. Reports, 2021, 335, 74-82.	0.0	0
76	FEATURES OF miRNA ASSOCIATIONS WITH mRNA OF MYOCARDIAL INFARCTION CANDIDATE GENES. Reports, 2021, 2, 46-53.	0.0	0
77	ASSOCIATIONS OF miRNA WITH mRNA OF ATHEROSCLEROSIS CANDIDATE GENES. News of the National Academy of Sciences of the Republic of Kazakhstan Series of Biological and Medical, 2020, 3, 5-13.	0.0	0