Marco Linari

List of Publications by Year
in descending order

61 papers	3,606 citations	136950 32 h-index	144013 57 g-index
62 all docs	62 docs citations	62 times ranked	1660 citing authors

#	Article	IF	Citations
1	Skeletal Muscle Performance Determined by Modulation of Number of Myosin Motors Rather Than Motor Force or Stroke Size. Cell, 2007, 131, 784-795.	28.9	274
2	Force generation by skeletal muscle is controlled by mechanosensing in myosin filaments. Nature, 2015, 528, 276-279.	27.8	249
3	Rapid regeneration of the actin-myosin power stroke in contracting muscle. Nature, 1992, 355, 638-641.	27.8	185
4	The myosin motor in muscle generates a smaller and slower working stroke at higher load. Nature, 2004, 428, 578-581.	27.8	183
5	The Stiffness of Skeletal Muscle in Isometric Contraction and Rigor: The Fraction of Myosin Heads Bound to Actin. Biophysical Journal, 1998, 74, 2459-2473.	0.5	168
6	Elastic bending and active tilting of myosin heads during muscle contraction. Nature, 1998, 396, 383-387.	27.8	155
7	Stiffness and Fraction of Myosin Motors Responsible for Active Force in Permeabilized Muscle Fibers from Rabbit Psoas. Biophysical Journal, 2007, 92, 2476-2490.	0.5	138
8	Mechanism of force generation by myosin heads in skeletal muscle. Nature, 2002, 415, 659-662.	27.8	133
9	Probing myosin structural conformation in vivo by second-harmonic generation microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7763-7768.	7.1	123
10	Myosin filament activation in the heart is tuned to the mechanical task. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3240-3245.	7.1	112
11	Interference fine structure and sarcomere length dependence of the axial x-ray pattern from active single muscle fibers. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 7226-7231.	7.1	110
12	Temperature dependence of the forceâ€generating process in single fibres from frog skeletal muscle. Journal of Physiology, 2003, 549, 93-106.	2.9	99
13	Skeletal muscle resists stretch by rapid binding of the second motor domain of myosin to actin. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20114-20119.	7.1	95
14	Tension transients during steady lengthening of tetanized muscle fibres of the frog.. Journal of Physiology, 1992, 445, 659-711.	2.9	87
15	Energy storage during stretch of active single fibres from frog skeletal muscle. Journal of Physiology, 2003, 548, 461-474.	2.9	79
16	The mechanism of the force response to stretch in human skinned muscle fibres with different myosin isoforms. Journal of Physiology, 2004, 554, 335-352.	2.9	73
17	Effect of Inorganic Phosphate on the Force and Number of Myosin Cross-Bridges During the Isometric Contraction of Permeabilized Muscle Fibers from Rabbit Psoas. Biophysical Journal, 2008, 95, 5798-5808.	0.5	73
18	Ca-Activation and Stretch-Activation in Insect Flight Muscle. Biophysical Journal, 2004, 87, 1101-1111.	0.5	68

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19	A kinetic model that explains the effect of inorganic phosphate on the mechanics and energetics of isometric contraction of fast skeletal muscle. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 19-27.	2.6	62
20	The working stroke of the myosin II motor in muscle is not tightly coupled to release of orthophosphate from its active site. Journal of Physiology, 2013, 591, 5187-5205.	2.9	62
21	Sarcomereâ€length dependence of myosin filament structure in skeletal muscle fibres of the frog. Journal of Physiology, 2014, 592, 1119-1137.	2.9	62
22	Nebulin plays a direct role in promoting strong actinâ€myosin interactions. FASEB Journal, 2009, 23, 4117-4125.	0.5	61
23	Motion of myosin head domains during activation and force development in skeletal muscle. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7236-7240.	7.1	59
24	Thick Filament Mechano-Sensing in Skeletal and Cardiac Muscles: A Common Mechanism Able to Adapt the Energetic Cost of the Contraction to the Task. Frontiers in Physiology, 2018, 9, 736.	2.8	58
25	Structural changes in the myosin filament and cross-bridges during active force development in single intact frog muscle fibres: stiffness and X-ray diffraction measurements. Journal of Physiology, 2006, 577, 971-984.	2.9	56
26	Structural and Biochemical Properties Show ARL3-GDP as a Distinct GTP Binding Protein. Structure, 2000, 8, 1239-1245.	3.3	51
27	The contributions of filaments and crossâ€bridges to sarcomere compliance in skeletal muscle. Journal of Physiology, 2014, 592, 3881-3899.	2.9	50
28	The mechanism of the resistance to stretch of isometrically contracting single muscle fibres. Journal of Physiology, 2010, 588, 495-510.	2.9	42
29	Size and speed of the working stroke of cardiac myosin in situ. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3675-3680.	7.1	41
30	Low temperature traps myosin motors of mammalian muscle in a refractory state that prevents activation. Journal of General Physiology, 2019, 151, 1272-1286.	1.9	40
31	Changes in conformation of myosin heads during the development of isometric contraction and rapid shortening in single frog muscle fibres. Journal of Physiology, 1999, 514, 305-312.	2.9	36
32	The Effect of Myofilament Compliance on Kinetics of Force Generation by Myosin Motors in Muscle. Biophysical Journal, 2009, 96, 583-592.	0.5	36
33	Force and number of myosin motors during muscle shortening and the coupling with the release of the ATP hydrolysis products. Journal of Physiology, 2015, 593, 3313-3332.	2.9	35
34	X-ray diffraction studies of the contractile mechanism in single muscle fibres. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 1883-1893.	4.0	33
35	The structural basis of the increase in isometric force production with temperature in frog skeletal muscle. Journal of Physiology, 2005, 567, 459-469.	2.9	33
36	Low-force transitions in single titin molecules reflect a memory of contractile history. Journal of Cell Science, 2014, 127, 858-70.	2.0	33

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37	New techniques in linear and non-linear laser optics in muscle research. Journal of Muscle Research and Cell Motility, 2006, 27, 469-479.	2.0	31
38	Inotropic interventions do not change the resting state of myosin motors during cardiac diastole. Journal of General Physiology, 2019, 151, 53-65.	1.9	31
39	Structural changes in myosin motors and filaments during relaxation of skeletal muscle. Journal of Physiology, 2009, 587, 4509-4521.	2.9	28
40	The Conformation of Myosin Head Domains in Rigor Muscle Determined by X-Ray Interference. Biophysical Journal, 2003, 85, 1098-1110.	0.5	26
41	Myopalladin promotes muscle growth through modulation of the serum response factor pathway. Journal of Cachexia, Sarcopenia and Muscle, 2020, 11, 169-194.	7.3	26
42	The myofilament elasticity and its effect on kinetics of force generation by the myosin motor. Archives of Biochemistry and Biophysics, 2014, 552-553, 108-116.	3.0	23
43	Structure-Function Relation of the Myosin Motor in Striated Muscle. Annals of the New York Academy of Sciences, 2005, 1047, 232-247.	3.8	22
44	Effects of myosin heavy chain (MHC) plasticity induced by HMGCoAâ€reductase inhibition on skeletal muscle functions. FASEB Journal, 2011, 25, 4037-4047.	0.5	21
45	Dependence of thick filament structure in relaxed mammalian skeletal muscle on temperature and interfilament spacing. Journal of General Physiology, 2021, 153, .	1.9	21
46	The effect of hypertonicity on force generation in tetanized single fibres from frog skeletal muscle.. Journal of Physiology, 1994, 476, 531-546.	2.9	19
47	The force and stiffness of myosin motors in the isometric twitch of a cardiac trabecula and the effect of the extracellular calcium concentration. Journal of Physiology, 2018, 596, 2581-2596.	2.9	17
48	Mechanics of myosin function in white muscle fibres of the dogfish, <i>Scyliorhinus canicula</i>. Journal of Physiology, 2012, 590, 1973-1988.	2.9	15
49	Orthophosphate increases the efficiency of slow muscle-myosin isoform in the presence of omecamtiv mecarbil. Nature Communications, 2020, 11, 3405.	12.8	14
50	Mechanical and energy characteristics during shortening in isolated type-1 muscle fibres from Xenopus laevis studied at maximal and submaximal activation. Pflugers Archiv European Journal of Physiology, 1997, 435, 145-150.	2.8	11
51	Thick Filament Length Changes in Muscle Have Both Elastic and Structural Components. Biophysical Journal, 2019, 116, 983-984.	0.5	11
52	Straightening Out the Elasticity of Myosin Cross-Bridges. Biophysical Journal, 2020, 118, 994-1002.	0.5	9
53	Cross-bridge kinetics studied with staircase shortening in single fibres from frog skeletal muscle. Journal of Muscle Research and Cell Motility, 1997, 18, 91-101.	2.0	8
54	Orthovanadate and Orthophosphate Inhibit Muscle Force via Two Different Pathways of the Myosin ATPase Cycle. Biophysical Journal, 2011, 100, 665-674.	0.5	7

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55	Muscle Thixotropy: More than Just Cross-Bridges? Response to Comment by Campbell and Lakie. Biophysical Journal, 2008, 94, 329-330.	0.5	5
56	Myosin motors that cannot bind actin leave their folded OFF state on activation of skeletal muscle. Journal of General Physiology, 2021, 153, .	1.9	4
57	Myosin Head Movements during Isometric Contraction Studied by X-Ray Diffraction of Single Frog Muscle Fibres. Advances in Experimental Medicine and Biology, 1998, 453, 265-270.	1.6	2
58	Functional imaging of muscle cells by second harmonic generation. , 2006, 6089, 238.		1
59	Sarcomere-Length Dependence of the Low Angle X-Ray Pattern from Skeletal Muscle Fibers at Rest and during Isometric Contraction. Biophysical Journal, 2012, 102, 147a-148a.	0.5	0
60	The Off State of the Thick Filament of Cardiac Muscle is Not Affected by Inotropic Interventions Like the Increase in Diastolic Sarcomere Length or the Addition of a Beta-Adrenergic Effector. Biophysical Journal, 2018, 114, 314a.	0.5	0
61	In Situ Characterization of the Working Stroke of the Slow and Fast Isoforms of Muscle Myosin. Biophysical Journal, 2020, 118, 120a.	0.5	0