Michael A Ferenczi

List of Publications by Year
in descending order

97 papers	3,787 citations	147801 31 h-index	133252 59 g-index
100 all docs	100 docs citations	100 times ranked	2745 citing authors

#	Article	IF	Citations
1	Functional and Molecular Characterisation of Heart Failure Progression in Mice and the Role of Myosin Regulatory Light Chains in the Recovery of Cardiac Muscle Function. International Journal of Molecular Sciences, 2022, 23, 88.	4.1	7
2	Interacting-heads motif explains the X-ray diffraction pattern of relaxed vertebrate skeletal muscle. Biophysical Journal, 2022, 121, 1354-1366.	0.5	9
3	Regulatory Light Chains in Cardiac Development and Disease. International Journal of Molecular Sciences, 2021, 22, 4351.	4.1	13
4	Mn 2+ â€Phosâ€Tag Polyacrylamide for the Quantification of Protein Phosphorylation Levels. Current Protocols, 2021, 1, e221.	2.9	2
5	Disrupting the LINC complex by AAV mediated gene transduction prevents progression of Lamin induced cardiomyopathy. Nature Communications, 2021, 12, 4722.	12.8	45
6	Development of a three-dimensional printed heart from computed tomography images of a plastinated specimen for learning anatomy. Anatomy and Cell Biology, 2020, 53, 48-57.	1.0	20
7	A Studentsâ€™ Model of Team-based Learning. Health Professions Education, 2019, 5, 294-302.	1.4	9
8	Implementation of team-based learning on a large scale: Three factors to keep in mind*. Medical Teacher, 2018, 40, 582-588.	1.8	43
9	Evaluation by medical students of the educational value of multiâ€material and multiâ€colored threeâ€dimensional printed models of the upper limb for anatomical education. Anatomical Sciences Education, 2018, 11, 54-64.	3.7	94
10	How cognitive engagement fluctuates during a team-based learning session and how it predicts academic achievement. Advances in Health Sciences Education, 2018, 23, 339-351.	3.3	28
11	The Closed State of the Thin Filament Is Not Occupied in Fully Activated Skeletal Muscle. Biophysical Journal, 2017, 112, 1455-1461.	0.5	3
12	Tropomyosin movement is described by a quantitative high-resolution model of X-ray diffraction of contracting muscle. European Biophysics Journal, 2017, 46, 335-342.	2.2	4
13	A post-MI power struggle: adaptations in cardiac power occur at the sarcomere level alongside MyBP-C and RLC phosphorylation. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 311, H465-H475.	3.2	7
14	Revisiting Frankâ€"Starling: regulatory light chain phosphorylation alters the rate of force redevelopment (<i>k</i>_{tr}) in a lengthâ€dependent fashion. Journal of Physiology, 2016, 594, 5237-5254.	2.9	19
15	Phosphorylation of the regulatory light chain of myosin in striated muscle: methodological perspectives. European Biophysics Journal, 2016, 45, 779-805.	2.2	31
16	Instrumentation to study myofibril mechanics from static to artificial simulations of cardiac cycle. MethodsX, 2016, 3, 156-170.	1.6	8
17	DCM Mutation ACTCE361G Causes Uncoupling of Myofibril Sensitivity from TnI Phosphorylation that can be Reversed by Epigallocatechin-3-Gallate. Biophysical Journal, 2015, 108, 292a.	0.5	0
18	Why Muscle is an Efficient Shock Absorber. PLoS ONE, 2014, 9, e85739.	2.5	19

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19	The Dilated Cardiomyopathy-Causing Mutation ACTC E361G in Cardiac Muscle Myofibrils Specifically Abolishes Modulation of Ca 2+ Regulation by Phosphorylation of Troponin I. Biophysical Journal, 2014, 107, 2369-2380.	0.5	22
20	Effects of Chronic Myocardial Infarction on Cardiac Muscle Performance and Structure In-Vivo and In-Vitro. Biophysical Journal, 2014, 106, 343a-344a.	0.5	0
21	Dcm-Causing Mutation E361G in Actin Uncouples Myofibril Ca2+ Sensitivity from Protein Phosphorylation. Biophysical Journal, 2014, 106, 774a-775a.	0.5	0
22	HOP Skip and Jump; but How?. Biophysical Journal, 2014, 106, 765a.	0.5	0
23	DCM-Causing Mutation E361G in Actin Slows Myofibril Relaxation Kinetics and Uncouples Myofibril Ca2+ Sensitivity from Protein Phosphorylation. Biophysical Journal, 2013, 104, 312a.	0.5	3
24	Myosin Regulatory Light Chain (RLC) Phosphorylation Change asÂa Modulator of Cardiac Muscle Contraction in Disease. Biophysical Journal, 2013, 104, 309a-310a.	0.5	1
25	Mechanical and energetic properties of papillary muscle from<i>ACTC</i>E99K transgenic mouse models of hypertrophic cardiomyopathy. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H1513-H1524.	3.2	25
26	Myosin Regulatory Light Chain (RLC) Phosphorylation Change as a Modulator of Cardiac Muscle Contraction in Disease. Journal of Biological Chemistry, 2013, 288, 13446-13454.	3.4	63
27	Non-Linear Optical Microscopy Sheds Light on Cardiovascular Disease. PLoS ONE, 2013, 8, e56136.	2.5	19
28	Stretch of Contracting Cardiac Muscle Abruptly Decreases the Rate of Phosphate Release at High and Low Calcium. Journal of Biological Chemistry, 2012, 287, 25696-25705.	3.4	15
29	Mutations of ventricular essential myosin light chain disturb myosin binding and sarcomeric sorting. Cardiovascular Research, 2012, 93, 390-396.	3.8	16
30	A Method to Exchange Recombinant Differentially Phosphorylated Rhodamine-Labeled Cardiac RLC into Permeabilized Cardiac Trabeculae. Biophysical Journal, 2012, 102, 359a.	0.5	0
31	The Fraction of Myosin Motors That Participate in Isometric Contraction ofÂRabbit Muscle Fibers at Near-Physiological Temperature. Biophysical Journal, 2011, 101, 404-410.	0.5	23
32	Millisecond-Scale Biochemical Response to Change in Strain. Biophysical Journal, 2011, 101, 2445-2454.	0.5	23
33	Semiâ€Automated Analysis of Organelle Movement and Membrane Content: Understanding Rabâ€Motor Complex Transport Function. Traffic, 2011, 12, 1686-1701.	2.7	14
34	FRET characterisation for cross-bridge dynamics in single-skinned rigor muscle fibres. European Biophysics Journal, 2011, 40, 13-27.	2.2	7
35	Response of Rigor Cross-bridges to Stretch Detected by Fluorescence Lifetime Imaging Microscopy of Myosin Essential Light Chain in Skeletal Muscle Fibers. Journal of Biological Chemistry, 2011, 286, 842-850.	3.4	13
36	Effect of phosphate and temperature on force exerted by white muscle fibres from dogfish. Journal of Muscle Research and Cell Motility, 2010, 31, 35-44.	2.0	6

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37	Effect of Inorganic Phosphate on the Rate of ADP Release During Ramp Shortening in Activated Permeabilized Fibers from Rabbit Psoas Muscle. Biophysical Journal, 2010, 98, 348a.	0.5	0
38	Myosin Heads Contribute to the Maintenance of Filament Order in Relaxed Rabbit Muscle. Biophysical Journal, 2010, 99, 1827-1834.	0.5	8
39	Fluorescence Lifetime Imaging Reveals that the Environment of the ATP Binding Site of Myosin in Muscle Senses Force. Biophysical Journal, 2010, 99, 2163-2169.	0.5	2
40	Investigation of a transgenic mouse model of familial dilated cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2010, 49, 380-389.	1.9	53
41	Insight into the actin-myosin motor from x-ray diffraction on muscle. Frontiers in Bioscience - Landmark, 2009, Volume, 3188.	3.0	14
42	Direct visualisation and kinetic analysis of normal and nemaline myopathy actin polymerisation using total internal reflection microscopy. Journal of Muscle Research and Cell Motility, 2009, 30, 85-92.	2.0	9
43	Time Course and Strain Dependence of ADP Release during Contraction of Permeabilized Skeletal Muscle Fibers. Biophysical Journal, 2009, 96, 3281-3294.	0.5	15
44	Measurement Of ATPase Activity During Ramped Stretches In Contracting Skeletal Muscle Fibers Of The Rabbit. Biophysical Journal, 2009, 96, 212a.	0.5	0
45	Ringâ€chain interconversion of sulforhodamineâ€amine conjugates involves an unusually labile Cï£¿N bond and allows measurement of sulfonamide ionization kinetics. Journal of Physical Organic Chemistry, 2008, 21, 286-298.	1.9	9
46	Morphoregulation by acetylcholinesterase in fibroblasts and astrocytes. Journal of Cellular Physiology, 2008, 215, 82-100.	4.1	33
47	Physiological properties of human diaphragm muscle fibres and the effect of chronic obstructive pulmonary disease. Journal of Physiology, 2008, 586, 2637-2650.	2.9	54
48	Direct Modeling of X-Ray Diffraction Pattern from Contracting Skeletal Muscle. Biophysical Journal, 2008, 95, 2880-2894.	0.5	24
49	Rab27a and MyoVa are the primary Mlph interactors regulating melanosome transport in melanocytes. Journal of Cell Science, 2007, 120, 3111-3122.	2.0	93
50	Fluorescence Lifetime Imaging to Detect Actomyosin States in Mammalian Muscle Sarcomeres. Biophysical Journal, 2007, 93, 2091-2101.	0.5	11
51	Rab27b Regulates Mast Cell Granule Dynamics and Secretion. Traffic, 2007, 8, 883-892.	2.7	92
52	Effect of Strain on Actomyosin Kinetics in Isometric Muscle Fibers. Biophysical Journal, 2006, 90, 3653-3665.	0.5	19
53	Passive properties of the diaphragm in COPD. Journal of Applied Physiology, 2006, 101, 1400-1405.	2.5	28
54	Influence of ionic strength on the time course of force development and phosphate release by dogfish muscle fibres. Journal of Physiology, 2005, 567, 989-1000.	2.9	13

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55	The â€œRoll and Lockâ€• Mechanism of Force Generation in Muscle. Structure, 2005, 13, 131-141.	3.3	70
56	Cdc42 and Par6â€"PKCÎ¶ regulate the spatially localized association of Dlg1 and APC to control cell polarization. Journal of Cell Biology, 2005, 170, 895-901.	5.2	277
57	Strong Binding of Myosin Heads Stretches and Twists the Actin Helix. Biophysical Journal, 2005, 88, 1902-1910.	0.5	51
58	Smooth muscle myosin: regulation and properties. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 1921-1930.	4.0	49
59	Actomyosin energy turnover declines while force remains constant during isometric muscle contraction. Journal of Physiology, 2004, 555, 27-43.	2.9	28
60	Myosin Regulatory Light Chain Phosphorylation and Strain Modulate Adenosine Diphosphate Release from Smooth Muscle Myosin. Biophysical Journal, 2004, 86, 2318-2328.	0.5	14
61	Crossbridge cycle in smooth muscle: kinetics assessed with flash photolysis and fluorescent probes. Journal of Muscle Research and Cell Motility, 2004, 25, 611-2.	2.0	0
62	Interaction of the actin cytoskeleton with microtubules regulates secretory organelle movement near the plasma membrane in human endothelial cells. Journal of Cell Science, 2003, 116, 3927-3938.	2.0	95
63	Micromechanical measurements on biological materials: muscle fibres. Biotechnology Letters, 2000, 22, 521-529.	2.2	2
64	Conformation of the myosin motor during force generation in skeletal muscle. Nature Structural Biology, 2000, 7, 482-485.	9.7	98
65	ATP Consumption and Efficiency of Human Single Muscle Fibers with Different Myosin Isoform Composition. Biophysical Journal, 2000, 79, 945-961.	0.5	296
66	Comparative Single-Molecule and Ensemble Myosin Enzymology: Sulfoindocyanine ATP and ADP Derivatives. Biophysical Journal, 2000, 78, 3048-3071.	0.5	73
67	Structural responses to the photolytic release of ATP in frog muscle fibres, observed by time-resolved X-ray diffraction. Journal of Physiology, 1999, 520, 681-696.	2.9	11
68	The efficiency of contraction in rabbit skeletal muscle fibres, determined from the rate of release of inorganic phosphate. Journal of Physiology, 1999, 517, 839-854.	2.9	83
69	Structural Changes in the Actinâ€"Myosin Cross-Bridges Associated with Force Generation Induced by Temperature Jump in Permeabilized Frog Muscle Fibers. Biophysical Journal, 1999, 77, 354-372.	0.5	58
70	Elastic bending and active tilting of myosin heads during muscle contraction. Nature, 1998, 396, 383-387.	27.8	155
71	Rate of Phosphate Release after Photoliberation of Adenosine 5â€²-Triphosphate in Slow and Fast Skeletal Muscle Fibers. Biophysical Journal, 1998, 75, 2389-2401.	0.5	27
72	Time-Resolved Measurements of Phosphate Release by Cycling Cross-Bridges in Portal Vein Smooth Muscle. Biophysical Journal, 1998, 75, 3031-3040.	0.5	12

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73	The ATPase Activity in Isometric and Shortening Skeletal Muscle Fibres. Advances in Experimental Medicine and Biology, 1998, 453, 331-341.	1.6	8
74	ATPase kinetics on activation of rabbit and frog permeabilized isometric muscle fibres: a real time phosphate assay. Journal of Physiology, 1997, 501, 125-148.	2.9	106
75	Muscle force is generated by myosin heads stereospecifically attached to actin. Nature, 1997, 388, 186-190.	27.8	95
76	Mechanical and structural properties underlying contraction of skeletal muscle fibers after partial	0.5	26
77	Inhibition of unloaded shortening velocity in permeabilized muscle fibres by caged ATP compounds. Journal of Muscle Research and Cell Motility, 1995, 16, 131-137.	2.0	34
78	Elastic distortion of myosin heads and repriming of the working stroke in muscle. Nature, 1995, 374, 553-555.	27.8	115
79	Changes in the x-ray diffraction pattern from single, intact muscle fibers produced by rapid shortening and stretch. Biophysical Journal, 1995, 68, 92S-96S; discussion 96S-98S.	0.5	11
80	A new method for the time-resolved measurement of phosphate release in permeabilized muscle fibers. Biophysical Journal, 1995, 68, 191S-192S; discussion 192S-193S.	0.5	10
81	A birefringence study of changes in myosin orientation during relaxation of skinned muscle fibers induced by photolytic ATP release. Biophysical Journal, 1994, 67, 1141-1148.	0.5	9
82	Kinetics of relaxation from rigor of permeabilized fast-twitch skeletal fibers from the rabbit using a novel caged ATP and apyrase. Biophysical Journal, 1994, 67, 2436-2447.	0.5	85
83	Synthesis and properties of a conformationally restricted spin-labeled analog of ATP and its interaction with myosin and skeletal muscle. Biochemistry, 1992, 31, 8043-8054.	2.5	23
84	Myosin head movements are synchronous with the elementary force-generating process in muscle. Nature, 1992, 357, 156-158.	27.8	205
85	A micromanipulation technique with a theoretical cell model for determining mechanical properties of single mammalian cells. Chemical Engineering Science, 1992, 47, 1347-1354.	3.8	76
86	Relaxation from rigor by photolysis of caged-ATP in different types of muscle fibres fromXenopus laevis. Journal of Muscle Research and Cell Motility, 1991, 12, 507-516.	2.0	3
87	A novel micromanipulation technique for measuring the bursting strength of single mammalian cells. Applied Microbiology and Biotechnology, 1991, 36, 208-210.	3.6	84
88	Modelling fibre kinetics. Journal of Muscle Research and Cell Motility, 1989, 10, 395-396.	2.0	0
89	Measurement of the reversibility of ATP binding to myosin in calcium-activated skinned fibers from rabbit skeletal muscle. Oxygen exchange between water and ATP released to the solution. Journal of Biological Chemistry, 1989, 264, 7193-201.	3.4	7
90	The elementary steps of the actomyosin ATPase in muscle fibres studied with caged-ATP. Advances in Experimental Medicine and Biology, 1988, 226, 181-8.	1.6	5

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91	Kinetics of ATP hydrolysis and tension production in skinned cardiac muscle of the guinea pig. Journal of Biological Chemistry, 1988, 263, 16750-6.	3.4	47
92	Phosphate burst in permeable muscle fibers of the rabbit. Biophysical Journal, 1986, 50, 471-477.	0.5	58
93	The kinetics of magnesium adenosine triphosphate cleavage in skinned muscle fibres of the rabbit.. Journal of Physiology, 1984, 352, 575-599.	2.9	132
94	The dependence of force and shortening velocity on substrate concentration in skinned muscle fibres from Rana temporaria.. Journal of Physiology, 1984, 350, 519-543.	2.9	138
95	Protein-protein interactions and their contribution in stabilizing frog myosin. FEBS Letters, 1982, 143, 213-216.	2.8	3
96	General considerations of cross-bridge models in relation to the dependence on MgATP concentration of mechanical parameters of skinned fibers from frog muscles. Society of General Physiologists Series, 1982, 37, 91-107.	0.6	15
97	The relation between maximum shortening velocity and the magnesium adenosine triphosphate concentration in frog skinned muscle fibres [proceedings]. Journal of Physiology, 1979, 292, 71P-72P.	2.9	4