E Michael Ostap

List of Publications by Year
in descending order

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Version: 2024-02-01

63 papers	3,687 citations	126907 33 h-index	144013 57 g-index
74 all docs	74 docs citations	74 times ranked	5018 citing authors

#	Article	IF	Citations
1	Relating biochemistry and function in the myosin superfamily. Current Opinion in Cell Biology, 2004, 16, 61-67.	5.4	256
2	Kinetic Mechanism and Regulation of Myosin VI. Journal of Biological Chemistry, 2001, 276, 32373-32381.	3.4	218
3	Myosin I Can Act As a Molecular Force Sensor. Science, 2008, 321, 133-136.	12.6	210
4	Chapter 6 Kinetic and Equilibrium Analysis of the Myosin ATPase. Methods in Enzymology, 2009, 455, 157-192.	1.0	136
5	ADP Inhibition of Myosin V ATPase Activity. Biophysical Journal, 2000, 79, 1524-1529.	0.5	134
6	Myo1c Binds Phosphoinositides through a Putative Pleckstrin Homology Domain. Molecular Biology of the Cell, 2006, 17, 4856-4865.	2.1	130
7	2,3-Butanedione monoxime (BDM) as a myosin inhibitor. Journal of Muscle Research and Cell Motility, 2002, 23, 305-308.	2.0	127
8	High-resolution cryo-EM structures of actin-bound myosin states reveal the mechanism of myosin force sensing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1292-1297.	7.1	109
9	WHAMM Directs the Arp2/3 Complex to the ER for Autophagosome Biogenesis through an Actin Comet Tail Mechanism. Current Biology, 2015, 25, 1791-1797.	3.9	107
10	Positive cardiac inotrope omecamtiv mecarbil activates muscle despite suppressing the myosin working stroke. Nature Communications, 2018, 9, 3838.	12.8	107
11	Myo1c binds tightly and specifically to phosphatidylinositol 4,5-bisphosphate and inositol 1,4,5-trisphosphate. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3118-3123.	7.1	105
12	Inherent Force-Dependent Properties of Î² -Cardiac Myosin Contribute to the Force-Velocity Relationship of Cardiac Muscle. Biophysical Journal, 2014, 107, L41-L44.	0.5	98
13	Myosin-I molecular motors at a glance. Journal of Cell Science, 2016, 129, 2689-95.	2.0	88
14	Actin and Light Chain Isoform Dependence of Myosin V Kineticsâ€. Biochemistry, 2000, 39, 14196-14202.	2.5	87
15	Dynactin functions as both a dynamic tether and brake during dynein-driven motility. Nature Communications, 2014, 5, 4807.	12.8	80
16	Myosin IC generates power over a range of loads via a new tension-sensing mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2433-40.	7.1	78
17	Kinetic Characterization of the Weak Binding States of Myosin Vâ€. Biochemistry, 2002, 41, 8508-8517.	2.5	75
18	Myosin-I nomenclature. Journal of Cell Biology, 2001, 155, 703-704.	5.2	71

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19	Single molecule mechanics resolves the earliest events in force generation by cardiac myosin. ELife, 2019, 8, .	6.0	68
20	Activity-Dependent Regulation of Distinct Transport and Cytoskeletal Remodeling Functions of the Dendritic Kinesin KIF21B. Neuron, 2016, 92, 857-872.	8.1	65
21	A Perspective on the Role of Myosins as Mechanosensors. Biophysical Journal, 2016, 110, 2568-2576.	0.5	64
22	The Kinetic Mechanism of Myo1e (Human Myosin-IC). Journal of Biological Chemistry, 2002, 277, 21514-21521.	3.4	62
23	An Actin Filament Population Defined by the Tropomyosin Tpm3.1 Regulates Glucose Uptake. Traffic, 2015, 16, 691-711.	2.7	61
24	Mechanism of Inhibition of Skeletal Muscle Actomyosin byN-Benzyl-p-toluenesulfonamideâ€. Biochemistry, 2003, 42, 6128-6135.	2.5	60
25	Dynamics of Myo1c (Myosin-Iβ) Lipid Binding and Dissociation. Journal of Biological Chemistry, 2002, 277, 42763-42768.	3.4	58
26	Myosin 1G Is an Abundant Class I Myosin in Lymphocytes Whose Localization at the Plasma Membrane Depends on Its Ancient Divergent Pleckstrin Homology (PH) Domain (Myo1PH). Journal of Biological Chemistry, 2010, 285, 8675-8686.	3.4	58
27	Membrane-Bound Myo1c Powers Asymmetric Motility of Actin Filaments. Current Biology, 2012, 22, 1688-1692.	3.9	58
28	MEMLET: An Easy-to-Use Tool for Data Fitting and Model Comparison Using Maximum-Likelihood Estimation. Biophysical Journal, 2016, 111, 273-282.	0.5	58
29	Regulation and control of myosin-I by the motor and light chain-binding domains. Trends in Cell Biology, 2013, 23, 81-89.	7.9	52
30	Myo1e Binds Anionic Phospholipids with High Affinity. Biochemistry, 2010, 49, 9353-9360.	2.5	50
31	Biochemical and Motile Properties of Myo1b Splice Isoforms. Journal of Biological Chemistry, 2005, 280, 41562-41567.	3.4	43
32	A vertebrate myosin-I structure reveals unique insights into myosin mechanochemical tuning. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2116-2121.	7.1	41
33	Mechanochemical tuning of myosin-I by the N-terminal region. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3337-44.	7.1	38
34	Modulation of Kinesinâ€™s Load-Bearing Capacity by Force Geometry and the Microtubule Track. Biophysical Journal, 2020, 118, 243-253.	0.5	38
35	Control of myosin-I force sensing by alternative splicing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 698-702.	7.1	37
36	Dynamic localization of myosin-I to endocytic structures inAcanthamoeba. Cytoskeleton, 2003, 54, 29-40.	4.4	36

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37	Calcium Regulation of Calmodulin Binding to and Dissociation from the Myo1c Regulatory Domain. Biochemistry, 2007, 46, 11718-11726.	2.5	34
38	Control of the Initiation and Termination of Kinesin-1-Driven Transport by Myosin-Ic and Nonmuscle Tropomyosin. Current Biology, 2015, 25, 523-529.	3.9	34
39	A Hearing Loss-Associated myo1c Mutation (R156W) Decreases the Myosin Duty Ratio and Force Sensitivity. Biochemistry, 2011, 50, 1831-1838.	2.5	33
40	Myosin modulators: emerging approaches for the treatment of cardiomyopathies and heart failure. Journal of Clinical Investigation, 2022, 132, .	8.2	33
41	Temperature Dependence of Nucleotide Association and Kinetic Characterization of Myo1bâ€. Biochemistry, 2006, 45, 11589-11597.	2.5	31
42	Myosin with hypertrophic cardiac mutation R712L has a decreased working stroke which is rescued by omecamtiv mecarbil. ELife, 2021, 10, .	6.0	30
43	Force Generation by Membrane-Associated Myosin-I. Scientific Reports, 2016, 6, 25524.	3.3	28
44	Mechanism of Regulation ofAcanthamoebaMyosin-IC by Heavy-Chain Phosphorylationâ€. Biochemistry, 2002, 41, 12450-12456.	2.5	27
45	Calcium Regulation of Myosin-I Tension Sensing. Biophysical Journal, 2012, 102, 2799-2807.	0.5	27
46	CIB1 and CaBP1 bind to the myo1c regulatory domain. Journal of Muscle Research and Cell Motility, 2007, 28, 285-291.	2.0	26
47	Tropomyosins as Discriminators of Myosin Function. Advances in Experimental Medicine and Biology, 2008, 644, 273-282.	1.6	25
48	Kinetic Schemes for Post-Synchronized Single Molecule Dynamics. Biophysical Journal, 2012, 102, L23-L25.	0.5	24
49	Kinetics of the Interaction of myo1c with Phosphoinositides. Journal of Biological Chemistry, 2009, 284, 28650-28659.	3.4	23
50	Measuring the Kinetic and Mechanical Properties of Non-processive Myosins Using Optical Tweezers. Methods in Molecular Biology, 2017, 1486, 483-509.	0.9	21
51	Opposing Kinesin and Myosin-I Motors Drive Membrane Deformation and Tubulation along Engineered Cytoskeletal Networks. Current Biology, 2018, 28, 236-248.e5.	3.9	19
52	Sites of Glucose Transporter-4 Vesicle Fusion with the Plasma Membrane Correlate Spatially with Microtubules. PLoS ONE, 2012, 7, e43662.	2.5	17
53	Electro-optic deflectors deliver advantages over acousto-optical deflectors in a high resolution, ultra-fast force-clamp optical trap. Optics Express, 2018, 26, 11181.	3.4	16
54	Adhesion force and attachment lifetime of the KIF16B-PX domain interaction with lipid membranes. Molecular Biology of the Cell, 2017, 28, 3315-3322.	2.1	13

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55	Single-Molecule Adhesion Forces and Attachment Lifetimes of Myosin-I Phosphoinositide Interactions. Biophysical Journal, 2010, 99, 3916-3922.	0.5	12
56	Microtubule dynamics influence the retrograde biased motility of kinesin-4 motor teams in neuronal dendrites. Molecular Biology of the Cell, 2022, 33, mbcE21100480.	2.1	11
57	The mechanochemistry of the kinesin-2 KIF3AC heterodimer is related to strain-dependent kinetic properties of KIF3A and KIF3C. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15632-15641.	7.1	9
58	Method for Measuring Single-Molecule Adhesion Forces and Attachment Lifetimes of Proteinâ€"Membrane Interactions. Methods in Molecular Biology, 2013, 1046, 389-403.	0.9	8
59	An ultra-fast EOD-based force-clamp detects rapid biomechanical transitions. , 2017, , .		5
60	Deconvolution of Camera Instrument Response Functions. Biophysical Journal, 2017, 112, 1214-1220.	0.5	3
61	The regulatory protein 14-3-3Î² binds to the IQ motifs of myosin-IC independent of phosphorylation. Journal of Biological Chemistry, 2020, 295, 3749-3756.	3.4	3
62	Opening remarks from the Editors. Biophysical Reviews, 2018, 10, 1479-1480.	3.2	0
63	Motors in transport and cytoskeleton remodeling. Molecular Biology of the Cell, 2019, 30, 734-734.	2.1	0