Michael J Greenberg

List of Publications by Year
in descending order

37 papers	1,593 citations	304602 22 h-index	345118 36 g-index
48 all docs	48 docs citations	48 times ranked	1704 citing authors

#	Article	IF	Citations
1	Myofilament glycation in diabetes reduces contractility by inhibiting tropomyosin movement, is rescued by cMyBPC domains. Journal of Molecular and Cellular Cardiology, 2022, 162, 1-9.	0.9	12
2	A pathogenic mechanism associated with myopathies and structural birth defects involves TPM2-directed myogenesis. JCI Insight, 2022, 7, .	2.3	4
3	Beyond genomicsâ€"technological advances improving the molecular characterization and precision treatment of heart failure. Heart Failure Reviews, 2021, 26, 405-415.	1.7	7
4	Complexity in genetic cardiomyopathies and new approaches for mechanism-based precision medicine. Journal of General Physiology, 2021, 153, .	0.9	25
5	SARS-CoV-2 Infects Human EngineeredÂHeart Tissues and Models COVID-19 Myocarditis. JACC Basic To Translational Science, 2021, 6, 331-345.	1.9	121
6	Mechanical dysfunction of the sarcomere induced by a pathogenic mutation in troponin T drives cellular adaptation. Journal of General Physiology, 2021, 153, .	0.9	13
7	A troponin T variant linked with pediatric dilated cardiomyopathy reduces the coupling of thin filament activation to myosin and calcium binding. Molecular Biology of the Cell, 2021, 32, 1677-1689.	0.9	6
8	Resident cardiac macrophages mediate adaptive myocardial remodeling. Immunity, 2021, 54, 2072-2088.e7.	6.6	76
9	Computational Tool for Ensemble Averaging of Single-Molecule Data. Biophysical Journal, 2021, 120, 10-20.	0.2	11
10	Cardiac myosin contraction and mechanotransduction in health and disease. Journal of Biological Chemistry, 2021, 297, 101297.	1.6	36
11	Variant R94C in <i>TNNT2</i> â€Encoded Troponin T Predisposes to Pediatric Restrictive Cardiomyopathy and Sudden Death Through Impaired Thin Filament Relaxation Resulting in Myocardial Diastolic Dysfunction. Journal of the American Heart Association, 2020, 9, e015111.	1.6	17
12	Conformational distributions of isolated myosin motor domains encode their mechanochemical properties. ELife, 2020, 9, .	2.8	28
13	Computational Tool to Study Perturbations inÂMuscle Regulation and Its Application toÂHeartÂDisease. Biophysical Journal, 2019, 116, 2246-2252.	0.2	16
14	Cooperative Changes in Solvent Exposure Identify Cryptic Pockets, Switches, and Allosteric Coupling. Biophysical Journal, 2019, 116, 818-830.	0.2	42
15	Disrupted mechanobiology links the molecular and cellular phenotypes in familial dilated cardiomyopathy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17831-17840.	3.3	46
16	Positive cardiac inotrope omecamtiv mecarbil activates muscle despite suppressing the myosin working stroke. Nature Communications, 2018, 9, 3838.	5.8	107
17	Genetic and Tissue Engineering Approaches to Modeling the Mechanics of Human Heart Failure for Drug Discovery. Frontiers in Cardiovascular Medicine, 2018, 5, 120.	1.1	13
18	Measuring the Kinetic and Mechanical Properties of Non-processive Myosins Using Optical Tweezers. Methods in Molecular Biology, 2017, 1486, 483-509.	0.4	21

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19	MEMLET: An Easy-to-Use Tool for Data Fitting and Model Comparison Using Maximum-Likelihood Estimation. Biophysical Journal, 2016, 111, 273-282.	0.2	58
20	A Perspective on the Role of Myosins as Mechanosensors. Biophysical Journal, 2016, 110, 2568-2576.	0.2	64
21	An Actin Filament Population Defined by the Tropomyosin Tpm3.1 Regulates Glucose Uptake. Traffic, 2015, 16, 691-711.	1.3	61
22	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.	3.3	38
23	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.	3.3	41
24	Inherent Force-Dependent Properties of Î² -Cardiac Myosin Contribute to the Force-Velocity Relationship of Cardiac Muscle. Biophysical Journal, 2014, 107, L41-L44.	0.2	98
25	Regulation and control of myosin-I by the motor and light chain-binding domains. Trends in Cell Biology, 2013, 23, 81-89.	3.6	52
26	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.	3.3	78
27	Kinetic Schemes for Post-Synchronized Single Molecule Dynamics. Biophysical Journal, 2012, 102, L23-L25.	0.2	24
28	Calcium Regulation of Myosin-I Tension Sensing. Biophysical Journal, 2012, 102, 2799-2807.	0.2	27
29	A Hearing Loss-Associated myo1c Mutation (R156W) Decreases the Myosin Duty Ratio and Force Sensitivity. Biochemistry, 2011, 50, 1831-1838.	1.2	33
30	The molecular basis of frictional loads in the in vitro motility assay with applications to the study of the loaded mechanochemistry of molecular motors. Cytoskeleton, 2010, 67, 273-285.	1.0	71
31	Cardiomyopathy-linked myosin regulatory light chain mutations disrupt myosin strain-dependent biochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17403-17408.	3.3	76
32	The direct molecular effects of fatigue and myosin regulatory light chain phosphorylation on the actomyosin contractile apparatus. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R989-R996.	0.9	31
33	Actin in action and inaction: The differential effects of hypertrophic and dilated cardiomyopathy actin mutations on thin filament regulation. Journal of Molecular and Cellular Cardiology, 2010, 48, 277-278.	0.9	2
34	Removal of the cardiac myosin regulatory light chain increases isometric force production. FASEB Journal, 2009, 23, 3571-3580.	0.2	46
35	The molecular effects of skeletal muscle myosin regulatory light chain phosphorylation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R265-R274.	0.9	56
36	Regulatory light chain mutations associated with cardiomyopathy affect myosin mechanics and kinetics. Journal of Molecular and Cellular Cardiology, 2009, 46, 108-115.	0.9	53

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37	Observation of Magnetoreceptive Behavior in a Multicellular Magnetotactic Prokaryote in Higher than Geomagnetic Fields. Biophysical Journal, 2005, 88, 1496-1499.	0.2	62