

# Michael J Greenberg

## List of Publications by Year in descending order

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Version: 2024-02-01

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	SARS-CoV-2 Infects Human Engineered Heart Tissues and Models COVID-19 Myocarditis. <i>JACC Basic To Translational Science</i> , 2021, 6, 331-345.	1.9	121
2	Positive cardiac inotrope omecamtiv mecarbil activates muscle despite suppressing the myosin working stroke. <i>Nature Communications</i> , 2018, 9, 3838.	5.8	107
3	Inherent Force-Dependent Properties of $\beta^2$ -Cardiac Myosin Contribute to the Force-Velocity Relationship of Cardiac Muscle. <i>Biophysical Journal</i> , 2014, 107, L41-L44.	0.2	98
4	Myosin IC generates power over a range of loads via a new tension-sensing mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E2433-40.	3.3	78
5	Cardiomyopathy-linked myosin regulatory light chain mutations disrupt myosin strain-dependent biochemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 17403-17408.	3.3	76
6	Resident cardiac macrophages mediate adaptive myocardial remodeling. <i>Immunity</i> , 2021, 54, 2072-2088.e7.	6.6	76
7	The molecular basis of frictional loads in the in vitro motility assay with applications to the study of the loaded mechanochemistry of molecular motors. <i>Cytoskeleton</i> , 2010, 67, 273-285.	1.0	71
8	A Perspective on the Role of Myosins as Mechanosensors. <i>Biophysical Journal</i> , 2016, 110, 2568-2576.	0.2	64
9	Observation of Magnetoreceptive Behavior in a Multicellular Magnetotactic Prokaryote in Higher than Geomagnetic Fields. <i>Biophysical Journal</i> , 2005, 88, 1496-1499.	0.2	62
10	An Actin Filament Population Defined by the Tropomyosin Tpm3.1 Regulates Glucose Uptake. <i>Traffic</i> , 2015, 16, 691-711.	1.3	61
11	MEMLET: An Easy-to-Use Tool for Data Fitting and Model Comparison Using Maximum-Likelihood Estimation. <i>Biophysical Journal</i> , 2016, 111, 273-282.	0.2	58
12	The molecular effects of skeletal muscle myosin regulatory light chain phosphorylation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2009, 297, R265-R274.	0.9	56
13	Regulatory light chain mutations associated with cardiomyopathy affect myosin mechanics and kinetics. <i>Journal of Molecular and Cellular Cardiology</i> , 2009, 46, 108-115.	0.9	53
14	Regulation and control of myosin-I by the motor and light chain-binding domains. <i>Trends in Cell Biology</i> , 2013, 23, 81-89.	3.6	52
15	Removal of the cardiac myosin regulatory light chain increases isometric force production. <i>FASEB Journal</i> , 2009, 23, 3571-3580.	0.2	46
16	Disrupted mechanobiology links the molecular and cellular phenotypes in familial dilated cardiomyopathy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17831-17840.	3.3	46
17	Cooperative Changes in Solvent Exposure Identify Cryptic Pockets, Switches, and Allosteric Coupling. <i>Biophysical Journal</i> , 2019, 116, 818-830.	0.2	42
18	A vertebrate myosin-I structure reveals unique insights into myosin mechanochemical tuning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2116-2121.	3.3	41

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19	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
20	Cardiac myosin contraction and mechanotransduction in health and disease. Journal of Biological Chemistry, 2021, 297, 101297.	1.6	36
21	A Hearing Loss-Associated myo1c Mutation (R156W) Decreases the Myosin Duty Ratio and Force Sensitivity. Biochemistry, 2011, 50, 1831-1838.	1.2	33
22	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
23	Conformational distributions of isolated myosin motor domains encode their mechanochemical properties. ELife, 2020, 9, .	2.8	28
24	Calcium Regulation of Myosin-I Tension Sensing. Biophysical Journal, 2012, 102, 2799-2807.	0.2	27
25	Complexity in genetic cardiomyopathies and new approaches for mechanism-based precision medicine. Journal of General Physiology, 2021, 153, .	0.9	25
26	Kinetic Schemes for Post-Synchronized Single Molecule Dynamics. Biophysical Journal, 2012, 102, L23-L25.	0.2	24
27	Measuring the Kinetic and Mechanical Properties of Non-processive Myosins Using Optical Tweezers. Methods in Molecular Biology, 2017, 1486, 483-509.	0.4	21
28	Variant R94C in <i>TNNT2</i> 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
29	Computational Tool to Study Perturbations in Muscle Regulation and Its Application to Heart Disease. Biophysical Journal, 2019, 116, 2246-2252.	0.2	16
30	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
31	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
32	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
33	Computational Tool for Ensemble Averaging of Single-Molecule Data. Biophysical Journal, 2021, 120, 10-20.	0.2	11
34	Beyond genomics technological advances improving the molecular characterization and precision treatment of heart failure. Heart Failure Reviews, 2021, 26, 405-415.	1.7	7
35	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
36	A pathogenic mechanism associated with myopathies and structural birth defects involves TPM2-directed myogenesis. JCI Insight, 2022, 7, .	2.3	4

#	ARTICLE	IF	CITATIONS
37	Actin in action and inaction: The differential effects of hypertrophic and dilated cardiomyopathy actin mutations on thin filament regulation. <i>Journal of Molecular and Cellular Cardiology</i> , 2010, 48, 277-278.	0.9	2