Navid Bavi

List of Publications by Year
in descending order

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43 papers	1,087 citations	430874 18 h-index	434195 31 g-index
47 all docs	47 docs citations	47 times ranked	1111 citing authors

#	Article	IF	Citations
1	Asymmetric effects of amphipathic molecules on mechanosensitive channels. Scientific Reports, 2022, 12, .	3.3	3
2	The conformational cycle of prestin underlies outer-hair cell electromotility. Nature, 2021, 600, 553-558.	27.8	53
3	Influence of the Lipid-Protein Interface on MSCS Mechanosensitive Channel Gating at High Resolutions. Biophysical Journal, 2020, 118, 523a.	0.5	0
4	Cell membrane mechanics and mechanosensory transduction. Current Topics in Membranes, 2020, 86, 83-141.	0.9	31
5	From Stretch to Deflection: Fine Tuning Mechanical Activation of ion Channels. Biophysical Journal, 2020, 118, 171a.	0.5	0
6	Membrane stiffness is one of the key determinants of E. coli MscS channel mechanosensitivity. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183203.	2.6	23
7	PIEZO1-Mediated Currents Are Modulated by Substrate Mechanics. ACS Nano, 2019, 13, 13545-13559.	14.6	44
8	Biophysical Principles of Ion-Channel-Mediated Mechanosensory Transduction. Cell Reports, 2019, 29, 1-12.	6.4	154
9	Evolutionary Specialization of Corynebacterium glutamicum MscCG, an Mscs-Like Mechanosensitive Channel, in Glutamate Export. Biophysical Journal, 2019, 116, 378a.	0.5	1
10	High-Resolution Structures of MscS in a Lipid Bilayer: Reinterpreting â€œForce from Lipidsâ€•Activation in Mechanosensitive Channels. Biophysical Journal, 2019, 116, 459a.	0.5	1
11	Molecular basis of force-from-lipids gating in the mechanosensitive channel MscS. ELife, 2019, 8, .	6.0	84
12	Mechanosensitivity of Ion Channels. , 2019, , 1-11.		0
13	A Computational Study Towards Engineering an MscL Nanovalve. Biophysical Journal, 2018, 114, 112a.	0.5	2
14	Cellular Mechanotransduction via Ion Channels at the Cell-Substrate Interface. Biophysical Journal, 2018, 114, 19a.	0.5	0
15	Streptomycin Entry is Mediated by the Mechanosensitive Channel MscCG of Corynebacterium Glutamicum. Biophysical Journal, 2018, 114, 491a.	0.5	0
16	InÂVivo Function of the Chaperonin TRiC in Î±-Actin Folding during Sarcomere Assembly. Cell Reports, 2018, 22, 313-322.	6.4	29
17	Cytoskeleton-Associated Proteins Modulate the Tension Sensitivity of Piezo1. Biophysical Journal, 2018, 114, 111a.	0.5	9
18	Bacterial Mechanosensors. Annual Review of Physiology, 2018, 80, 71-93.	13.1	140

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19	Tuning ion channel mechanosensitivity by asymmetry of the transbilayer pressure profile. Biophysical Reviews, 2018, 10, 1377-1384.	3.2	36
20	Evolutionary specialization of MscCG, an MscS-like mechanosensitive channel, in amino acid transport in Corynebacterium glutamicum. Scientific Reports, 2018, 8, 12893.	3.3	24
21	Mechanosensitivity of Ion Channels. , 2018, , 1-11.		1
22	Electrophysiological Characterization of Mechanosensitive Channels in the Native Membrane of Corynebacterium Glutamicum. Biophysical Journal, 2017, 112, 534a.	0.5	0
23	Mechanically-Induced Gating in PKD2L1 (Trpp2): Calcium-Induced Activation Masquerading as Force Sensitivity?. Biophysical Journal, 2017, 112, 311a.	0.5	0
24	Perturbation of Bilayer Surface Tension Differentially Modulates Mechanosensitive Ion Channels. Biophysical Journal, 2017, 112, 416a.	0.5	5
25	Structural Dynamics of the MSCL C-Terminal Domain. Biophysical Journal, 2017, 112, 413a.	0.5	0
26	Toward a structural blueprint for bilayer-mediated channel mechanosensitivity. Channels, 2017, 11, 91-93.	2.8	23
27	Principles of Mechanosensing at the Membrane Interface. Springer Series in Biophysics, 2017, , 85-119.	0.4	15
28	Origin of the Force. Current Topics in Membranes, 2017, 79, 59-96.	0.9	63
29	Structural Dynamics of the MscL C-terminal Domain. Scientific Reports, 2017, 7, 17229.	3.3	16
30	Nanomechanical properties of MscL Î± helices: A steered molecular dynamics study. Channels, 2017, 11, 209-223.	2.8	20
31	Pulling MscL open via N-terminal and TM1 helices: A computational study towards engineering an MscL nanovalve. PLoS ONE, 2017, 12, e0183822.	2.5	28
32	The N-Terminal Helix Acts as a Dynamic Membrane Coupler in the Gating Cycle of the Mechanosensitive Channel MscL. Biophysical Journal, 2016, 110, 116a.	0.5	0
33	The role of MscL amphipathic N terminus indicates a blueprint for bilayer-mediated gating of mechanosensitive channels. Nature Communications, 2016, 7, 11984.	12.8	87
34	Energy of Liposome Patch Adhesion to the Pipet Glass Determined by Confocal Fluorescence Microscopy. Journal of Physical Chemistry Letters, 2016, 7, 4530-4534.	4.6	6
35	The N-Terminal Domain Acts as an Anchor during the Gating Cycle ofÂMscL. Biophysical Journal, 2015, 108, 564a.	0.5	1
36	DQ thermal buckling analysis of embedded curved carbon nanotubes based on nonlocal elasticity theory. Latin American Journal of Solids and Structures, 2015, 12, 1901-1917.	1.0	9

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37	Lipidâ€“protein interactions: Lessons learned from stress. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1744-1756.	2.6	43
38	Unidirectional incorporation of a bacterial mechanosensitive channel into liposomal membranes. FASEB Journal, 2015, 29, 4334-4345.	0.5	33
39	Biophysical implications of lipid bilayer rheometry for mechanosensitive channels. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13864-13869.	7.1	59
40	Gating Mechanism of Mechanosensitive Ion Channels Studied by Continuum Mechanics. Biophysical Journal, 2014, 106, 554a-555a.	0.5	2
41	Geometrical Optimization of the Overlap in Mixed Adhesive Lap Joints. Journal of Adhesion, 2013, 89, 948-972.	3.0	20
42	Shear stress distribution in adhesive layers of a double-lap joint with void or bond separation. Journal of Adhesion Science and Technology, 2013, 27, 1197-1225.	2.6	20
43	Finite element simulation of the gating mechanism of mechanosensitive ion channels. Proceedings of SPIE, 2013, , .	0.8	1