

Jeffrey J Fredberg

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6208583/publications.pdf>

Version: 2024-02-01

173
papers

17,906
citations

14655

66
h-index

14759

127
g-index

195
all docs

195
docs citations

195
times ranked

12178
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical Compression of Human Airway Epithelial Cells Induces Release of Extracellular Vesicles Containing Tenascin C. <i>Cells</i> , 2022, 11, 256.	4.1	6
2	On the origins of order. <i>Soft Matter</i> , 2022, 18, 2346-2353.	2.7	8
3	Vimentin intermediate filaments and filamentous actin form unexpected interpenetrating networks that redefine the cell cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2115217119.	7.1	28
4	Nuclear lamin isoforms differentially contribute to LINC complex-dependent nucleocytoplasmic coupling and whole-cell mechanics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2121816119.	7.1	33
5	Validation of a Novel Compact System for the Measurement of Lung Volumes. <i>Chest</i> , 2021, 159, 2356-2365.	0.8	6
6	Genomic signatures of the unjamming transition in compressed human bronchial epithelial cells. <i>Science Advances</i> , 2021, 7, .	10.3	14
7	Tumorigenic mesenchymal clusters are less sensitive to moderate osmotic stresses due to low amounts of junctional E-cadherin. <i>Scientific Reports</i> , 2021, 11, 16279.	3.3	19
8	Are cell jamming and unjamming essential in tissue development?. <i>Cells and Development</i> , 2021, 168, 203727.	1.5	30
9	A novel jamming phase diagram links tumor invasion to non-equilibrium phase separation. <i>IScience</i> , 2021, 24, 103252.	4.1	43
10	Unjamming and collective migration in MCF10A breast cancer cell lines. <i>Biochemical and Biophysical Research Communications</i> , 2020, 521, 706-715.	2.1	42
11	Cell swelling, softening and invasion in a three-dimensional breast cancer model. <i>Nature Physics</i> , 2020, 16, 101-108.	16.7	176
12	Airway smooth muscle tone increases actin filamentogenesis and contractile capacity. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2020, 318, L442-L451.	2.9	8
13	A theoretical model of collective cell polarization and alignment. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 137, 103860.	4.8	25
14	In primary airway epithelial cells, the unjamming transition is distinct from the epithelial-to-mesenchymal transition. <i>Nature Communications</i> , 2020, 11, 5053.	12.8	107
15	Epithelial layer unjamming shifts energy metabolism toward glycolysis. <i>Scientific Reports</i> , 2020, 10, 18302.	3.3	30
16	A novel method to make viscoelastic polyacrylamide gels for cell culture and traction force microscopy. <i>APL Bioengineering</i> , 2020, 4, 036104.	6.2	36
17	Relationship between velocities, tractions, and intercellular stresses in the migrating epithelial monolayer. <i>Physical Review E</i> , 2020, 101, 062405.	2.1	2
18	Mechanical forces induce an asthma gene signature in healthy airway epithelial cells. <i>Scientific Reports</i> , 2020, 10, 966.	3.3	34

#	ARTICLE	IF	CITATIONS
19	Anti-fibrotic effects of tannic acid through regulation of a sustained TGF-beta receptor signaling. <i>Respiratory Research</i> , 2019, 20, 168.	3.6	15
20	Traction Microscopy Integrated with Microfluidics for Chemotactic Collective Migration. <i>Journal of Visualized Experiments</i> , 2019, , .	0.3	1
21	Mechanical signaling in a pulmonary microvascular endothelial cell monolayer. <i>Biochemical and Biophysical Research Communications</i> , 2019, 519, 337-343.	2.1	8
22	Probe Sensitivity to Cortical versus Intracellular Cytoskeletal Network Stiffness. <i>Biophysical Journal</i> , 2019, 116, 518-529.	0.5	46
23	Traction microscopy with integrated microfluidics: responses of the multi-cellular island to gradients of HGF. <i>Lab on A Chip</i> , 2019, 19, 1579-1588.	6.0	11
24	The tumor suppressor p53 can promote collective cellular migration. <i>PLoS ONE</i> , 2019, 14, e0202065.	2.5	12
25	Scaling Physiologic Function from Cell to Tissue in Asthma, Cancer, and Development. <i>Annals of the American Thoracic Society</i> , 2018, 15, S35-S37.	3.2	1
26	Long-range stress transmission guides endothelial gap formation. <i>Biochemical and Biophysical Research Communications</i> , 2018, 495, 749-754.	2.1	16
27	Geometric constraints during epithelial jamming. <i>Nature Physics</i> , 2018, 14, 613-620.	16.7	196
28	Contact guidance and collective migration in the advancing epithelial monolayer. <i>Connective Tissue Research</i> , 2018, 59, 309-315.	2.3	11
29	Transient stretch induces cytoskeletal fluidization through the severing action of cofilin. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2018, 314, L799-L807.	2.9	24
30	Contribution of rostral fluid shift to intrathoracic airway narrowing in asthma. <i>Journal of Applied Physiology</i> , 2017, 122, 809-816.	2.5	12
31	Cell volume change through water efflux impacts cell stiffness and stem cell fate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E8618-E8627.	7.1	362
32	Long-lived force patterns and deformation waves at repulsive epithelial boundaries. <i>Nature Materials</i> , 2017, 16, 1029-1037.	27.5	65
33	Epithelial Cells Induce a Cyclo-Oxygenase-1â€œDependent Endogenous Reduction in Airway Smooth Muscle Contractile Phenotype. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2017, 57, 683-691.	2.9	7
34	Homogenizing cellular tension by hepatocyte growth factor in expanding epithelial monolayer. <i>Scientific Reports</i> , 2017, 7, 45844.	3.3	20
35	Reduced Baseline Airway Caliber Relates to Larger Airway Sensitivity to Rostral Fluid Shift in Asthma. <i>Frontiers in Physiology</i> , 2017, 8, 1012.	2.8	11
36	The actin regulator zyxin reinforces airway smooth muscle and accumulates in airways of fatal asthmatics. <i>PLoS ONE</i> , 2017, 12, e0171728.	2.5	25

#	ARTICLE	IF	CITATIONS
37	Airway and Parenchymal Strains during Bronchoconstriction in the Precision Cut Lung Slice. <i>Frontiers in Physiology</i> , 2016, 7, 309.	2.8	21
38	Collective migration and cell jamming in asthma, cancer and development. <i>Journal of Cell Science</i> , 2016, 129, 3375-83.	2.0	126
39	Non-equilibrium cytoquake dynamics in cytoskeletal remodeling and stabilization. <i>Soft Matter</i> , 2016, 12, 8506-8511.	2.7	17
40	Cellular Contraction and Polarization Drive Collective Cellular Motion. <i>Biophysical Journal</i> , 2016, 110, 2729-2738.	0.5	135
41	Smooth muscle in human bronchi is disposed to resist airway distension. <i>Respiratory Physiology and Neurobiology</i> , 2016, 229, 51-58.	1.6	13
42	Hidden in the mist no more: physical force in cell biology. <i>Nature Methods</i> , 2016, 13, 124-125.	19.0	18
43	Emergent Behaviors in Cell Mechanics. , 2016, , 41-55.		1
44	Problems in biology with many scales of length: Cell-cell adhesion and cell jamming in collective cellular migration. <i>Experimental Cell Research</i> , 2016, 343, 54-59.	2.6	32
45	Cell Jamming in the Airway Epithelium. <i>Annals of the American Thoracic Society</i> , 2016, 13, S64-S67.	3.2	14
46	And I hope you like jamming too. <i>New Journal of Physics</i> , 2015, 17, 091001.	2.9	11
47	High-throughput screening for modulators of cellular contractile force. <i>Integrative Biology (United Kingdom)</i> 7, 107-114. doi:10.1039/C4IB00014G	1.3	60
48	Fluid shear, intercellular stress, and endothelial cell alignment. <i>American Journal of Physiology - Cell Physiology</i> , 2015, 308, C657-C664.	4.6	100
49	Interleukin-1 β and tumor necrosis factor- α increase stiffness and impair contractile function of articular chondrocytes. <i>Acta Biochimica Et Biophysica Sinica</i> , 2015, 47, 121-129.	2.0	43
50	Putting the Squeeze on Airway Epithelia. <i>Physiology</i> , 2015, 30, 293-303.	3.1	29
51	Jeffrey Fredberg: Flow under pressure. <i>Journal of Cell Biology</i> , 2015, 210, 868-869.	5.2	0
52	Unjamming and cell shape in the asthmatic airway epithelium. <i>Nature Materials</i> , 2015, 14, 1040-1048.	27.5	484
53	Biomechanics of Schlemm's canal endothelium and intraocular pressure reduction. <i>Progress in Retinal and Eye Research</i> , 2015, 44, 86-98.	15.5	133
54	Power Steering, Power Brakes, and Jamming: Evolution of Collective Cell-Cell Interactions. <i>Physiology</i> , 2014, 29, 218-219.	3.1	21

#	ARTICLE	IF	CITATIONS
55	Glass-like dynamics in the cell and in cellular collectives. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2014, 6, 137-149.	6.6	39
56	Altered mechanobiology of Schlemm's canal endothelial cells in glaucoma. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13876-13881.	7.1	144
57	Airway Contractility in the Precision-Cut Lung Slice after Cryopreservation. American Journal of Respiratory Cell and Molecular Biology, 2014, 50, 876-881.	2.9	40
58	Comment on "Intracellular stresses in patterned cell assemblies" by M. Moussus et al., Soft Matter, 2014, 10, 2414. Soft Matter, 2014, 10, 7681-7682.	2.7	3
59	Hypercompliant Apical Membranes of Bladder Umbrella Cells. Biophysical Journal, 2014, 107, 1273-1279.	0.5	14
60	Collective migration and cell jamming. Differentiation, 2013, 86, 121-125.	1.9	202
61	Cytoskeletal stiffness, friction, and fluidity of cancer cell lines with different metastatic potential. Clinical and Experimental Metastasis, 2013, 30, 237-250.	3.3	107
62	The Role of Vimentin Intermediate Filaments in Cortical and Cytoplasmic Mechanics. Biophysical Journal, 2013, 105, 1562-1568.	0.5	225
63	Mush rather than machine. Nature Materials, 2013, 12, 184-185.	27.5	40
64	Glassy Dynamics, Cell Mechanics, and Endothelial Permeability. Journal of Physical Chemistry B, 2013, 117, 12850-12856.	2.6	23
65	Propulsion and navigation within the advancing monolayer sheet. Nature Materials, 2013, 12, 856-863.	27.5	161
66	Real estate of monolayer permeability: location location location. Laboratory Investigation, 2013, 93, 148-150.	3.7	1
67	Physiology's Impact: Applying Mathematics and Advanced Technologies. Physiology, 2013, 28, 363-365.	3.1	0
68	Monolayer Stress Microscopy: Limitations, Artifacts, and Accuracy of Recovered Intercellular Stresses. PLoS ONE, 2013, 8, e55172.	2.5	156
69	Illuminating human health through cell mechanics. Swiss Medical Weekly, 2013, 143, w13766.	1.6	4
70	Airway smooth muscle resolidification after stretch, but not static contractile force, is dependent on zyxin. FASEB Journal, 2013, 27, 723.2.	0.5	0
71	Monolayer Stress Microscopy: limitations, artifacts, and accuracy of recovered intercellular stresses. FASEB Journal, 2013, 27, 1217.5.	0.5	0
72	Bio-Mechanical Properties of the Mammalian Urothelium. FASEB Journal, 2013, 27, 1217.6.	0.5	0

#	ARTICLE	IF	CITATIONS
73	Navigation within the cellular monolayer. FASEB Journal, 2013, 27, 1217-18.	0.5	0
74	Dilatation of the Constricted Human Airway by Tidal Expansion of Lung Parenchyma. American Journal of Respiratory and Critical Care Medicine, 2012, 186, 225-232.	5.6	90
75	Low intensity ultrasound perturbs cytoskeleton dynamics. Soft Matter, 2012, 8, 2438.	2.7	73
76	Cell Elasticity Determines Macrophage Function. PLoS ONE, 2012, 7, e41024.	2.5	220
77	Fluidization, resolidification, and reorientation of the endothelial cell in response to slow tidal stretches. American Journal of Physiology - Cell Physiology, 2012, 303, C368-C375.	4.6	54
78	Mechanical waves during tissue expansion. Nature Physics, 2012, 8, 628-634.	16.7	418
79	Cytoskeletal Fluidization and Resolidification are Required for Reorientation of Endothelial Cells. , 2012, , .		0
80	Emergence of airway smooth muscle functions related to structural malleability. Journal of Applied Physiology, 2011, 110, 1130-1135.	2.5	15
81	Collective cell guidance by cooperative intercellular forces. Nature Materials, 2011, 10, 469-475.	27.5	781
82	Plithotaxis and emergent dynamics in collective cellular migration. Trends in Cell Biology, 2011, 21, 638-646.	7.9	211
83	In Bronchospasm, Fluctuations Come to Life. American Journal of Respiratory and Critical Care Medicine, 2011, 184, 1321-1322.	5.6	1
84	Glass-like dynamics of collective cell migration. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4714-4719.	7.1	593
85	Substrate stiffening promotes endothelial monolayer disruption through enhanced physical forces. American Journal of Physiology - Cell Physiology, 2011, 300, C146-C154.	4.6	205
86	Pulling it together in three dimensions. Nature Methods, 2010, 7, 963-965.	19.0	5
87	Collective cell guidance by cooperative intercellular forces. Nature Precedings, 2010, , .	0.1	3
88	Fluidization and Resolidification of the Human Bladder Smooth Muscle Cell in Response to Transient Stretch. PLoS ONE, 2010, 5, e12035.	2.5	94
89	Remodeling of Integrated Contractile Tissues and Its Dependence on Strain-Rate Amplitude. Physical Review Letters, 2010, 105, 158102.	7.8	24
90	Stretch magnitude and frequency-dependent actin cytoskeleton remodeling in alveolar epithelia. American Journal of Physiology - Cell Physiology, 2010, 299, C345-C353.	4.6	38

#	ARTICLE	IF	CITATIONS
91	Mapping the cytoskeletal prestress. American Journal of Physiology - Cell Physiology, 2010, 298, C1245-C1252.	4.6	66
92	Mechanosensing of substrate thickness. Physical Review E, 2010, 82, 041918.	2.1	58
93	Cell Migration Driven by Cooperative Substrate Deformation Patterns. Physical Review Letters, 2010, 104, 168104.	7.8	247
94	Reinforcement versus Fluidization in Cytoskeletal Mechanoresponsiveness. PLoS ONE, 2009, 4, e5486.	2.5	232
95	Mechanism of Inspiratory and Expiratory Crackles. Chest, 2009, 135, 156-164.	0.8	79
96	Defining the role of syndecan-4 in mechanotransduction using surface-modification approaches. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22102-22107.	7.1	109
97	Modulation of host cell mechanics by <i>Trypanosoma cruzi</i> . Journal of Cellular Physiology, 2009, 218, 315-322.	4.1	34
98	Biomechanics: Cell Research and Applications for the Next Decade. Annals of Biomedical Engineering, 2009, 37, 847-859.	2.5	169
99	Physical forces during collective cell migration. Nature Physics, 2009, 5, 426-430.	16.7	989
100	Percolation in a network with long-range connections: Implications for cytoskeletal structure and function. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1521-1526.	2.6	8
101	Cell stiffness, contractile stress and the role of extracellular matrix. Biochemical and Biophysical Research Communications, 2009, 382, 697-703.	2.1	67
102	Airway smooth muscle and bronchospasm: Fluctuating, fluidizing, freezing. Respiratory Physiology and Neurobiology, 2008, 163, 17-24.	1.6	49
103	Universality in cell mechanics. Soft Matter, 2008, 4, 1750.	2.7	116
104	Strange Dynamics of a Dynamic Cytoskeleton. Proceedings of the American Thoracic Society, 2008, 5, 58-61.	3.5	9
105	Airway Hyperresponsiveness, Remodeling, and Smooth Muscle Mass. American Journal of Respiratory Cell and Molecular Biology, 2007, 37, 264-272.	2.9	122
106	Cytoskeleton dynamics: Fluctuations within the network. Biochemical and Biophysical Research Communications, 2007, 355, 324-330.	2.1	90
107	Directional memory and caged dynamics in cytoskeletal remodelling. Biochemical and Biophysical Research Communications, 2007, 360, 797-801.	2.1	22
108	Biophysical basis for airway hyperresponsiveness This article is one of a selection of papers published in the Special Issue on Recent Advances in Asthma Research.. Canadian Journal of Physiology and Pharmacology, 2007, 85, 700-714.	1.4	25

#	ARTICLE	IF	CITATIONS
109	Mechanotransduction, asthma and airway smooth muscle. <i>Drug Discovery Today: Disease Models</i> , 2007, 4, 131-137.	1.2	15
110	COUNTERPOINT: AIRWAY SMOOTH MUSCLE IS NOT USEFUL. <i>Journal of Applied Physiology</i> , 2007, 102, 1709-1710.	2.5	20
111	Universal physical responses to stretch in the living cell. <i>Nature</i> , 2007, 447, 592-595.	27.8	626
112	Airway smooth muscle proliferation and mechanics: effects of AMP kinase agonists. <i>MCB Molecular and Cellular Biomechanics</i> , 2007, 4, 143-57.	0.7	14
113	Filamin-A and Rheological Properties of Cultured Melanoma Cells. <i>Biophysical Journal</i> , 2006, 90, 2199-2205.	0.5	36
114	Airway Smooth Muscle Mechanics, Remodeling and Proliferation: Effects of Aicar and Metformin. , 2006, , .		0
115	Tidal breathing pattern differentially antagonizes bronchoconstriction in C57BL/6J vs. A/J mice. <i>Journal of Applied Physiology</i> , 2006, 101, 249-255.	2.5	20
116	Fast and slow dynamics of the cytoskeleton. <i>Nature Materials</i> , 2006, 5, 636-640.	27.5	279
117	Do Biophysical Properties of the Airway Smooth Muscle in Culture Predict Airway Hyperresponsiveness?. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2006, 35, 55-64.	2.9	115
118	STRESS TRANSMISSION IN THE LUNG: Pathways from Organ to Molecule. <i>Annual Review of Physiology</i> , 2006, 68, 507-541.	18.1	104
119	Viscoelasticity of the human red blood cell. <i>FASEB Journal</i> , 2006, 20, A280.	0.5	0
120	Deformability, dynamics, and remodeling of cytoskeleton of the adherent living cell. <i>Biorheology</i> , 2006, 43, 1-30.	0.4	29
121	Nanomechanics of lung epithelial cells. <i>International Journal of Nanotechnology</i> , 2005, 2, 180.	0.2	7
122	Cytoskeletal remodelling and slow dynamics in the living cell. <i>Nature Materials</i> , 2005, 4, 557-561.	27.5	434
123	Length adaptation of airway smooth muscle: a stochastic model of cytoskeletal dynamics. <i>Journal of Applied Physiology</i> , 2005, 99, 2087-2098.	2.5	23
124	Airway smooth muscle tone modulates mechanically induced cytoskeletal stiffening and remodeling. <i>Journal of Applied Physiology</i> , 2005, 99, 634-641.	2.5	37
125	Smooth muscle length adaptation and actin filament length: a network model of the cytoskeletal dysregulation. <i>Canadian Journal of Physiology and Pharmacology</i> , 2005, 83, 923-931.	1.4	16
126	Normal and Cystic Fibrosis Airway Surface Liquid Homeostasis. <i>Journal of Biological Chemistry</i> , 2005, 280, 35751-35759.	3.4	298

#	ARTICLE	IF	CITATIONS
127	Obesity, smooth muscle, and airway hyperresponsiveness. <i>Journal of Allergy and Clinical Immunology</i> , 2005, 115, 925-927.	2.9	203
128	The Use and Misuse of Penh in Animal Models of Lung Disease. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2004, 31, 373-374.	2.9	228
129	On the terminology for describing the length-force relationship and its changes in airway smooth muscle. <i>Journal of Applied Physiology</i> , 2004, 97, 2029-2034.	2.5	81
130	Linearity and time-scale invariance of the creep function in living cells. <i>Journal of the Royal Society Interface</i> , 2004, 1, 91-97.	3.4	115
131	Bronchospasm and its biophysical basis in airway smooth muscle. <i>Respiratory Research</i> , 2004, 5, 2.	3.6	59
132	Rheology of airway smooth muscle cells is associated with cytoskeletal contractile stress. <i>Journal of Applied Physiology</i> , 2004, 96, 1600-1605.	2.5	128
133	Role of heat shock protein 27 in cytoskeletal remodeling of the airway smooth muscle cell. <i>Journal of Applied Physiology</i> , 2004, 96, 1701-1713.	2.5	83
134	Fractional Derivatives Embody Essential Features of Cell Rheological Behavior. <i>Annals of Biomedical Engineering</i> , 2003, 31, 692-699.	2.5	157
135	Extraction and reconstitution of calponin and consequent contractile ability in permeabilized smooth muscle fibers. <i>Analytical Biochemistry</i> , 2003, 321, 8-21.	2.4	6
136	Remodeling of the airway smooth muscle cell: are we built of glass?. <i>Respiratory Physiology and Neurobiology</i> , 2003, 137, 109-124.	1.6	66
137	Time scale and other invariants of integrative mechanical behavior in living cells. <i>Physical Review E</i> , 2003, 68, 041914.	2.1	317
138	Oscillatory magnetic tweezers based on ferromagnetic beads and simple coaxial coils. <i>Review of Scientific Instruments</i> , 2003, 74, 4012-4020.	1.3	28
139	The first three minutes: smooth muscle contraction, cytoskeletal events, and soft glasses. <i>Journal of Applied Physiology</i> , 2003, 95, 413-425.	2.5	121
140	A finite element model of cell deformation during magnetic bead twisting. <i>Journal of Applied Physiology</i> , 2002, 93, 1429-1436.	2.5	185
141	Traction fields, moments, and strain energy that cells exert on their surroundings. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 282, C595-C605.	4.6	886
142	Cell prestress. I. Stiffness and prestress are closely associated in adherent contractile cells. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 282, C606-C616.	4.6	591
143	Inhibition of the p38 MAP kinase pathway destabilizes smooth muscle length during physiological loading. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2002, 282, L1117-L1121.	2.9	40
144	Stiffness changes in cultured airway smooth muscle cells. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 283, C792-C801.	4.6	153

#	ARTICLE	IF	CITATIONS
145	Dynamic equilibration of airway smooth muscle contraction during physiological loading. <i>Journal of Applied Physiology</i> , 2002, 92, 771-779.	2.5	71
146	Airway obstruction in asthma: does the response to a deep inspiration matter?. <i>Respiratory Research</i> , 2001, 2, 273.	3.6	25
147	Scaling the Microrheology of Living Cells. <i>Physical Review Letters</i> , 2001, 87, 148102.	7.8	1,056
148	Measurement of cell microrheology by magnetic twisting cytometry with frequency domain demodulation. <i>Journal of Applied Physiology</i> , 2001, 91, 1152-1159.	2.5	136
149	Selected Contribution: Time course and heterogeneity of contractile responses in cultured human airway smooth muscle cells. <i>Journal of Applied Physiology</i> , 2001, 91, 986-994.	2.5	167
150	Relaxation of activated airway smooth muscle: relative potency of isoproterenol vs. tidal stretch. <i>Journal of Applied Physiology</i> , 2001, 90, 2306-2310.	2.5	103
151	Mechanical properties of cultured human airway smooth muscle cells from 0.05 to 0.4 Hz. <i>Journal of Applied Physiology</i> , 2000, 89, 1619-1632.	2.5	146
152	Perturbed Equilibria of Myosin Binding in Airway Smooth Muscle: Bond-Length Distributions, Mechanics, and ATP Metabolism. <i>Biophysical Journal</i> , 2000, 79, 2667-2681.	0.5	123
153	Frozen objects: Small airways, big breaths, and asthma. <i>Journal of Allergy and Clinical Immunology</i> , 2000, 106, 615-624.	2.9	88
154	Tidal volume amplitude affects the degree of induced bronchoconstriction in dogs. <i>Journal of Applied Physiology</i> , 1999, 87, 1674-1677.	2.5	35
155	Implications of heterogeneous bead behavior on cell mechanical properties measured with magnetic twisting cytometry. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 194, 120-125.	2.3	77
156	Force heterogeneity in a two-dimensional network model of lung tissue elasticity. <i>Journal of Applied Physiology</i> , 1998, 85, 1223-1229.	2.5	46
157	Perhaps Airway Smooth Muscle Dysfunction Contributes to Asthmatic Bronchial Hyperresponsiveness After All. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 1997, 17, 144-146.	2.9	129
158	Friction in airway smooth muscle: mechanism, latch, and implications in asthma. <i>Journal of Applied Physiology</i> , 1996, 81, 2703-2703.	2.5	208
159	A Microstructural Approach to Cytoskeletal Mechanics based on Tensegrity. <i>Journal of Theoretical Biology</i> , 1996, 181, 125-136.	1.7	212
160	Clinical measurement of airway area profile by a new acoustic reflection method. <i>Journal of Biomechanics</i> , 1994, 27, 859.	2.1	1
161	Understanding the pressure cost of ventilation: Why does high-frequency ventilation work?. <i>Critical Care Medicine</i> , 1994, 22, S49-S57.	0.9	97
162	Aerosol deposition in the pulmonary acinus. <i>Journal of Aerosol Science</i> , 1992, 23, 461-464.	3.8	3

#	ARTICLE	IF	CITATIONS
163	Pressure profiles show features essential to aerodynamic valving in geese. <i>Respiration Physiology</i> , 1991, 84, 295-309.	2.7	39
164	Axial dispersion of inert species in alveolated channels. <i>Chemical Engineering Science</i> , 1991, 46, 1419-1426.	3.8	25
165	Pulmonary Surfactant as a Vehicle for Intratracheal Delivery of Technetium Sulfur Colloid and Pentamidine in Hamster Lungs. <i>The American Review of Respiratory Disease</i> , 1991, 144, 909-913.	2.9	93
166	Continuum scaling for spreading drops. <i>Nature</i> , 1989, 340, 24-24.	27.8	3
167	Inspiratory valving in avian bronchi: aerodynamic considerations. <i>Respiration Physiology</i> , 1988, 72, 241-255.	2.7	58
168	Bird lung models show that convective inertia effects inspiratory aerodynamic valving. <i>Respiration Physiology</i> , 1988, 73, 111-124.	2.7	53
169	Discrete lung sounds: Crackles (rales) as stress-relaxation quadrupoles. <i>Journal of the Acoustical Society of America</i> , 1983, 73, 1036-1046.	1.1	51
170	Acoustic determinants of respiratory system properties. <i>Annals of Biomedical Engineering</i> , 1981, 9, 463-473.	2.5	21
171	A modal perspective of lung response. <i>Journal of the Acoustical Society of America</i> , 1978, 63, 962-966.	1.1	18
172	Origin and character of vascular murmurs: Model studies. <i>Journal of the Acoustical Society of America</i> , 1977, 61, 1077-1085.	1.1	47
173	Biophysical Basis of Airway Smooth Muscle Contraction and Hyperresponsiveness in Asthma. , 0, , 1-30.		0