BÃ©la Suki

List of Publications by Year
in descending order

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170	7,766	47006	60623
papers	citations	47	81
		h-index	g-index

174	174	174	5810
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Decreasing size of cardiogenic oscillations reflects decreasing compliance of the respiratory system during long-term ventilation. Journal of Applied Physiology, 2004, 96, 879-884.	2.5	555
2	Avalanches and power-law behaviour in lung inflation. Nature, 1994, 368, 615-618.	27.8	267
3	Biomechanics of the lung parenchyma: critical roles of collagen and mechanical forces. Journal of Applied Physiology, 2005, 98, 1892-1899.	2.5	263
4	A three-dimensional model of the human airway tree. Journal of Applied Physiology, 1999, 87, 2207-2217.	2.5	237
5	Mechanical interactions between collagen and proteoglycans: implications for the stability of lung tissue. Journal of Applied Physiology, 2005, 98, 672-679.	2.5	221
6	Risk of severe asthma episodes predicted from fluctuation analysis of airway function. Nature, 2005, 438, 667-670.	27.8	196
7	Airway Constriction Pattern Is a Central Component of Asthma Severity. American Journal of Respiratory and Critical Care Medicine, 2001, 164, 207-215.	5.6	160
8	On the Progressive Nature of Emphysema. American Journal of Respiratory and Critical Care Medicine, 2003, 168, 516-521.	5.6	158
9	Roles of Mechanical Forces and Collagen Failure in the Development of Elastase-induced Emphysema. American Journal of Respiratory and Critical Care Medicine, 2001, 164, 1920-1926.	5.6	150
10	Lung Parenchymal Mechanics. , 2011, 1, 1317-1351.		139
11	Effects of collagenase and elastase on the mechanical properties of lung tissue strips. Journal of Applied Physiology, 2000, 89, 3-14.	2.5	134
12	Complexity of chronic asthma and chronic obstructive pulmonary disease: implications for risk assessment, and disease progression and control. Lancet, The, 2008, 372, 1088-1099.	13.7	133
13	Regulation of Mitochondrial Structure and Dynamics by the Cytoskeleton and Mechanical Factors. International Journal of Molecular Sciences, 2017, 18, 1812.	4.1	132
14	Rheology of airway smooth muscle cells is associated with cytoskeletal contractile stress. Journal of Applied Physiology, 2004, 96, 1600-1605.	2.5	128
15	Extracellular matrix mechanics in lung parenchymal diseases. Respiratory Physiology and Neurobiology, 2008, 163, 33-43.	1.6	125
16	Mechanics, nonlinearity, and failure strength of lung tissue in a mouse model of emphysema: possible role of collagen remodeling. Journal of Applied Physiology, 2005, 98, 503-511.	2.5	122
17	Linking Parenchymal Disease Progression to Changes in Lung Mechanical Function by Percolation. American Journal of Respiratory and Critical Care Medicine, 2007, 176, 617-623.	5.6	119
18	Fluctuations and Power Laws in Pulmonary Physiology. American Journal of Respiratory and Critical Care Medicine, 2002, 166, 133-137.	5.6	115

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19	Lung tissue mechanics as an emergent phenomenon. Journal of Applied Physiology, 2011, 110, 1111-1118.	2.5	115
20	Quantitative characterization of airspace enlargement in emphysema. Journal of Applied Physiology, 2006, 100, 186-193.	2.5	111
21	Variable Tidal Volume Ventilation Improves Lung Mechanics and Gas Exchange in a Rodent Model of Acute Lung Injury. American Journal of Respiratory and Critical Care Medicine, 2002, 165, 366-371.	5.6	108
22	Variable ventilation induces endogenous surfactant release in normal guinea pigs. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2003, 285, L370-L375.	2.9	108
23	Dynamic properties of lung parenchyma: mechanical contributions of fiber network and interstitial cells. Journal of Applied Physiology, 1997, 83, 1420-1431.	2.5	107
24	Comparison of variable and conventional ventilation in a sheep saline lavage lung injury model*. Critical Care Medicine, 2006, 34, 439-445.	0.9	107
25	Tissue heterogeneity in the mouse lung: effects of elastase treatment. Journal of Applied Physiology, 2004, 97, 204-212.	2.5	106
26	Rheological Behavior of Living Cells Is Timescale-Dependent. Biophysical Journal, 2007, 93, L39-L41.	0.5	100
27	Variable stretch pattern enhances surfactant secretion in alveolar type II cells in culture. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2009, 296, L574-L581.	2.9	98
28	Modeling lung perfusion abnormalities to explain early COVID-19 hypoxemia. Nature Communications, 2020, 11, 4883.	12.8	95
29	Relationship between dynamic respiratory mechanics and disease heterogeneity in sheep lavage injury*. Critical Care Medicine, 2007, 35, 870-878.	0.9	93
30	Dynamic instabilities in the inflating lung. Nature, 2002, 417, 809-811.	27.8	84
31	A Role of Myocardin Related Transcription Factor-A (MRTF-A) in Scleroderma Related Fibrosis. PLoS ONE, 2015, 10, e0126015.	2.5	77
32	Tidal stretches do not modulate responsiveness of intact airways in vitro. Journal of Applied Physiology, 2010, 109, 295-304.	2.5	75
33	Lung and alveolar wall elastic and hysteretic behavior in rats: effects of in vivo elastase treatment. Journal of Applied Physiology, 2003, 95, 1926-1936.	2.5	71
34	Partitioning of lung tissue response and inhomogeneous airway constriction at the airway opening. Journal of Applied Physiology, 1997, 82, 1349-1359.	2.5	69
35	Branching design of the bronchial tree based on a diameter-flow relationship. Journal of Applied Physiology, 1997, 82, 968-976.	2.5	68
36	Morphological mechanism of the development of pulmonary emphysema in klotho mice. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2361-2365.	7.1	64

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37	Mechanical and Failure Properties of Extracellular Matrix Sheets as a Function of Structural Protein Composition. Biophysical Journal, 2008, 94, 1916-1929.	0.5	64
38	Three-dimensional measurement of alveolar airspace volumes in normal and emphysematous lungs using micro-CT. Journal of Applied Physiology, 2009, 107, 583-592.	2.5	62
39	Microtubule Dynamics Regulate Cyclic Stretch-Induced Cell Alignment in Human Airway Smooth Muscle Cells. PLoS ONE, 2011, 6, e26384.	2.5	62
40	Emphysema and Mechanical Stress-Induced Lung Remodeling. Physiology, 2013, 28, 404-413.	3.1	60
41	Fluctuation-driven mechanotransduction regulates mitochondrial-network structureÂandÂfunction. Nature Materials, 2015, 14, 1049-1057.	27.5	60
42	Structureâ€“Function Relations in an Elastase-Induced Mouse Model of Emphysema. American Journal of Respiratory Cell and Molecular Biology, 2011, 45, 517-524.	2.9	57
43	Temporal complexity in clinical manifestations of lung disease. Journal of Applied Physiology, 2011, 110, 1723-1731.	2.5	55
44	Avalanches in the Lung: A Statistical Mechanical Model. Physical Review Letters, 1996, 76, 2192-2195.	7.8	52
45	Early Emphysema in the Tight Skin and Pallid Mice. American Journal of Respiratory Cell and Molecular Biology, 2006, 34, 688-694.	2.9	51
46	Hysteresivity of the lung and tissue strip in the normal rat: effects of heterogeneities. Journal of Applied Physiology, 2001, 91, 737-747.	2.5	50
47	Relating Airway Diameter Distributions to Regular Branching Asymmetry in the Lung. Physical Review Letters, 2005, 95, 168101.	7.8	50
48	Combined Effects of Ventilation Mode and Positive End-Expiratory Pressure on Mechanics, Gas Exchange and the Epithelium in Mice with Acute Lung Injury. PLoS ONE, 2013, 8, e53934.	2.5	50
49	Correlation properties of tidal volume and end-tidal O₂ and CO₂ concentrations in healthy infants. Journal of Applied Physiology, 2002, 92, 1817-1827.	2.5	49
50	Mechanical Forces Regulate Elastase Activity and Binding Site Availability in Lung Elastin. Biophysical Journal, 2010, 99, 3076-3083.	0.5	49
51	Nonlinear elasticity of the lung extracellular microenvironment is regulated by macroscale tissue strain. Acta Biomaterialia, 2019, 92, 265-276.	8.3	49
52	Aging impairs smooth muscle-mediated regulation of aortic stiffness: a defect in shock absorption function?. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1252-H1261.	3.2	47
53	Proteoglycans Maintain Lung Stability in an Elastase-Treated Mouse Model of Emphysema. American Journal of Respiratory Cell and Molecular Biology, 2014, 51, 26-33.	2.9	45
54	Systems Biology and Clinical Practice in Respiratory Medicine. The Twain Shall Meet. American Journal of Respiratory and Critical Care Medicine, 2016, 194, 1053-1061.	5.6	44

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55	Design of a new variable-ventilation method optimized for lung recruitment in mice. Journal of Applied Physiology, 2008, 104, 1329-1340.	2.5	43
56	Viscoelastic and dynamic nonlinear properties of airway smooth muscle tissue: roles of mechanical force and the cytoskeleton. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2006, 290, L1227-L1237.	2.9	42
57	Avalanche Dynamics of Crackle Sound in the Lung. Physical Review Letters, 2001, 87, 088101.	7.8	40
58	Assessment of peripheral lung mechanics. Respiratory Physiology and Neurobiology, 2008, 163, 54-63.	1.6	40
59	Linking Microscopic Spatial Patterns of Tissue Destruction in Emphysema to Macroscopic Decline in Stiffness Using a 3D Computational Model. PLoS Computational Biology, 2011, 7, e1001125.	3.2	39
60	Effects of heterogeneities on the partitioning of airway and tissue properties in normal mice. Journal of Applied Physiology, 2007, 102, 859-869.	2.5	38
61	A computational model of the response of adherent cells to stretch and changes in substrate stiffness. Journal of Applied Physiology, 2014, 116, 825-834.	2.5	38
62	Variability of lung function predicts loss of asthma control following withdrawal of inhaled corticosteroid treatment. Thorax, 2010, 65, 403-408.	5.6	37
63	Epithelial and endothelial damage induced by mechanical ventilation modes. Current Opinion in Critical Care, 2014, 20, 17-24.	3.2	36
64	Characterization of a Mouse Model of Emphysema Induced by Multiple Instillations of Low-Dose Elastase. Frontiers in Physiology, 2016, 7, 457.	2.8	36
65	Emergent Structure-Function Relations in Emphysema and Asthma. Critical Reviews in Biomedical Engineering, 2011, 39, 263-280.	0.9	35
66	Effects of elastase on the mechanical and failure properties of engineered elastin-rich matrices. Journal of Applied Physiology, 2005, 98, 1434-1441.	2.5	33
67	A zipper network model of the failure mechanics of extracellular matrices. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1081-1086.	7.1	33
68	Mechanical failure, stress redistribution, elastase activity and binding site availability on elastin during the progression of emphysema. Pulmonary Pharmacology and Therapeutics, 2012, 25, 268-275.	2.6	33
69	Assessing the Functional Mechanical Properties of Bioengineered Organs With Emphasis on the Lung. Journal of Cellular Physiology, 2014, 229, 1134-1140.	4.1	33
70	Harmonic distortion from nonlinear systems with broadband inputs: Applications to lung mechanics. Annals of Biomedical Engineering, 1995, 23, 672-681.	2.5	32
71	On the Role of Surface Tension in the Pathophysiology of Emphysema. American Journal of Respiratory and Critical Care Medicine, 2005, 171, 300-304.	5.6	32
72	Elastase-Induced Lung Emphysema Models in Mice. Methods in Molecular Biology, 2017, 1639, 67-75.	0.9	32

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73	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. Fluctuation and Noise Letters, 2003, 03, R1-R25.	1.5	31
74	Linking Ventilator Injury-Induced Leak across the Blood-Gas Barrier to Derangements in Murine Lung Function. Frontiers in Physiology, 2017, 8, 466.	2.8	31
75	Mathematical Modeling of the First Inflation of Degassed Lungs. Annals of Biomedical Engineering, 1998, 26, 608-617.	2.5	30
76	Size distribution of recruited alveolar volumes in airway reopening. Journal of Applied Physiology, 2000, 89, 2030-2040.	2.5	29
77	Modeling the dynamics of airway constriction: effects of agonist transport and binding. Journal of Applied Physiology, 2010, 109, 553-563.	2.5	29
78	Mechanical Forces Accelerate Collagen Digestion by Bacterial Collagenase in Lung Tissue Strips. Frontiers in Physiology, 2016, 7, 287.	2.8	29
79	Monitoring the Temporal Changes of Respiratory Resistance: A Novel Test for the Management of Asthma. American Journal of Respiratory and Critical Care Medicine, 2012, 185, 1330-1331.	5.6	28
80	Scaling behavior in crackle sound during lung inflation. Physical Review E, 1999, 60, 4659-4663.	2.1	26
81	Impact of microvascular circulation on peripheral lung stability. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2004, 287, L879-L889.	2.9	26
82	In silico modeling of interstitial lung mechanics: implications for disease development and repair. Drug Discovery Today: Disease Models, 2007, 4, 139-145.	1.2	26
83	Alveolar leak develops by a rich-get-richer process in ventilator-induced lung injury. PLoS ONE, 2018, 13, e0193934.	2.5	26
84	Design of a New Stretching Apparatus and the Effects of Cyclic Strain and Substratum on Mouse Lung Epithelial-12 Cells. Annals of Biomedical Engineering, 2007, 35, 1156-1164.	2.5	25
85	Complexity and Emergent Phenomena. , 2011, 1, 995-1029.		25
86	Parametric and Nonparametric Nonlinear System Identification of Lung Tissue Strip Mechanics. Annals of Biomedical Engineering, 1999, 27, 548-562.	2.5	24
87	Differential effects of static and cyclic stretching during elastase digestion on the mechanical properties of extracellular matrices. Journal of Applied Physiology, 2007, 103, 803-811.	2.5	24
88	Avalanches and power law behavior in aortic dissection propagation. Science Advances, 2020, 6, eaaz1173.	10.3	24
89	Tuning mitochondrial structure and function to criticality by fluctuation-driven mechanotransduction. Scientific Reports, 2020, 10, 407.	3.3	23
90	Topographic distribution of idiopathic pulmonary fibrosis: a hybrid physics- and agent-based model. Physiological Measurement, 2018, 39, 064007.	2.1	22

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91	An Analytical Model for Estimating Alveolar Wall Elastic Moduli From Lung Tissue Uniaxial Stress-Strain Curves. Frontiers in Physiology, 2020, 11, 121.	2.8	22
92	Sensitivity Analysis for Evaluating Nonlinear Models of Lung Mechanics. Annals of Biomedical Engineering, 1998, 26, 230-241.	2.5	21
93	Design of a Novel Equi-Biaxial Stretcher for Live Cellular and Subcellular Imaging. PLoS ONE, 2015, 10, e0140283.	2.5	21
94	Regulatory Roles of Fluctuation-Driven Mechanotransduction in Cell Function. Physiology, 2016, 31, 346-358.	3.1	21
95	Scale dependence of structure-function relationship in the emphysematous mouse lung. Frontiers in Physiology, 2015, 6, 146.	2.8	20
96	A network model of correlated growth of tissue stiffening in pulmonary fibrosis. New Journal of Physics, 2014, 16, 065022.	2.9	19
97	A Synthetic Bioinspired Carbohydrate Polymer with Mucoadhesive Properties. Angewandte Chemie - International Edition, 2020, 59, 704-710.	13.8	19
98	Fractal Analysis of Lung Structure in Chronic Obstructive Pulmonary Disease. Frontiers in Physiology, 2020, 11, 603197.	2.8	19
99	Effects of reduced tidal volume ventilation on pulmonary function in mice before and after acute lung injury. Journal of Applied Physiology, 2007, 103, 1551-1559.	2.5	18
100	A High-Throughput System for Cyclic Stretching of Precision-Cut Lung Slices During Acute Cigarette Smoke Extract Exposure. Frontiers in Physiology, 2020, 11, 566.	2.8	17
101	Correlated Variability in the Breathing Pattern and End-Expiratory Lung Volumes in Conscious Humans. PLoS ONE, 2015, 10, e0116317.	2.5	17
102	A Frequency Domain Approach to Nonlinear and Structure Identification for Long Memory Systems: Application to Lung Mechanics. Annals of Biomedical Engineering, 1999, 27, 1-13.	2.5	16
103	Analysis of the harmonic content of the tidal flow waveforms in infants. Journal of Applied Physiology, 2001, 91, 1687-1693.	2.5	16
104	Jamming dynamics of stretch-induced surfactant release by alveolar type II cells. Journal of Applied Physiology, 2012, 112, 824-831.	2.5	16
105	Temporal dynamics of recurrent airway symptoms and cellular random walk. Journal of Applied Physiology, 2003, 95, 2122-2127.	2.5	15
106	Entropy Production and the Pressureâ€“Volume Curve of the Lung. Frontiers in Physiology, 2016, 7, 73.	2.8	15
107	Optimization of Variable Ventilation for Physiology, Immune Response and Surfactant Enhancement in Preterm Lambs. Frontiers in Physiology, 2017, 8, 425.	2.8	15
108	Volume distributions of avalanches in lung inflation: A statistical mechanical approach. Physical Review E, 1997, 56, 3385-3394.	2.1	14

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109	Sensitivity Analysis of Kernel Estimates: Implications in Nonlinear Physiological System Identification. Annals of Biomedical Engineering, 1998, 26, 488-501.	2.5	14
110	Factors Affecting Volterra Kernel Estimation: Emphasis on Lung Tissue Viscoelasticity. Annals of Biomedical Engineering, 1998, 26, 103-116.	2.5	14
111	A novel device to stretch multiple tissue samples with variable patterns: Application for mRNA regulation in tissue-engineered constructs. Biomatter, 2013, 3, .	2.6	14
112	CT Imaging-Based Low-Attenuation Super Clusters in Three Dimensions and the Progression of Emphysema. Chest, 2019, 155, 79-87.	0.8	14
113	Variable ventilation enhances ventilation without exacerbating injury in preterm lambs with respiratory distress syndrome. Pediatric Research, 2012, 72, 384-392.	2.3	12
114	A Markov chain model of particle deposition in the lung. Scientific Reports, 2020, 10, 13573.	3.3	12
115	A Mechanical Design Principle for Tissue Structure and Function in the Airway Tree. PLoS Computational Biology, 2013, 9, e1003083.	3.2	11
116	Biomechanics of the Aging Lung Parenchyma. Engineering Materials and Processes, 2015, , 95-133.	0.4	11
117	A Synthetic Bioinspired Carbohydrate Polymer with Mucoadhesive Properties. Angewandte Chemie, 2020, 132, 714-720.	2.0	11
118	Tissue traction microscopy to quantify muscle contraction within precision-cut lung slices. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L323-L330.	2.9	11
119	Viscoleastic properties of the visceral pleura and its contribution to lung impedance. Respiration Physiology, 1992, 90, 271-287.	2.7	10
120	Dynamics of enzymatic digestion of elastic fibers and networks under tension. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9414-9419.	7.1	10
121	The Major Transitions of Life from a Network Perspective. Frontiers in Physiology, 2012, 3, 94.	2.8	10
122	Homeostatic maintenance via degradation and repair of elastic fibers under tension. Scientific Reports, 2016, 6, 27474.	3.3	10
123	Multilineage transduction of resident lung cells in vivo by AAV2/8 for Î±1-antitrypsin gene therapy. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16042.	4.1	10
124	Perimeter growth of a branched structure: Application to crackle sounds in the lung. Physical Review E, 2003, 68, 011909.	2.1	9
125	Blood pressure-induced physiological strain variability modulates wall structure and function in aorta rings. Physiological Measurement, 2018, 39, 105014.	2.1	9
126	Predicting Structure-Function Relations and Survival following Surgical and Bronchoscopic Lung Volume Reduction Treatment of Emphysema. PLoS Computational Biology, 2017, 13, e1005282.	3.2	9

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127	Inflation instability in the lung: an analytical model of a thick-walled alveolus with wavy fibres under large deformations. Journal of the Royal Society Interface, 2021, 18, 20210594.	3.4	9
128	In search of complexity. Journal of Applied Physiology, 2010, 109, 1571-1572.	2.5	8
129	Heart rate fluctuation after birth predicts subsequent cardiorespiratory stability in preterm infants. Pediatric Research, 2019, 86, 348-354.	2.3	8
130	Percolation of collagen stress in a random network model of the alveolar wall. Scientific Reports, 2021, 11, 16654.	3.3	8
131	A time-varying biased random walk approach to human growth. Scientific Reports, 2017, 7, 7805.	3.3	7
132	Effect of continuous positive airway pressure on breathing variability in early preterm lung disease. Pediatric Pulmonology, 2018, 53, 755-761.	2.0	7
133	Changes in respiratory elastance after deep inspirations reflect surface film functionality in mice with acute lung injury. Journal of Applied Physiology, 2015, 119, 258-265.	2.5	6
134	A microfluidic chamber-based approach to map the shear moduli of vascular cells and other soft materials. Scientific Reports, 2017, 7, 2305.	3.3	6
135	Tidal Stretches Differently Regulate the Contractile and Cytoskeletal Elements in Intact Airways. PLoS ONE, 2014, 9, e94828.	2.5	6
136	Estimating the diameter of airways susceptible for collapse using crackle sound. Journal of Applied Physiology, 2009, 107, 1504-1512.	2.5	5
137	Computational modeling helps uncover mechanisms related to the progression of emphysema. Drug Discovery Today: Disease Models, 2015, 15, 9-15.	1.2	5
138	Design and nonlinear modeling of a sensitive sensor for the measurement of flow in mice. Physiological Measurement, 2018, 39, 075002.	2.1	5
139	Linking Physiological Biomarkers of Ventilator-Induced Lung Injury to a Rich-Get-Richer Mechanism of Injury Progression. Annals of Biomedical Engineering, 2019, 47, 638-645.	2.5	5
140	Assessing Structureâ€“Function Relations in Mice Using the Forced Oscillation Technique and Quantitative Histology. Methods in Molecular Biology, 2017, 1639, 77-91.	0.9	5
141	Reply to Noble, Hernandez, Mitchell, and Janssen. Journal of Applied Physiology, 2010, 109, 940-941.	2.5	5
142	An Analytic Model of Tissue Self-Healing and Its Network Implementation: Application to Fibrosis and Aging. Frontiers in Physiology, 2020, 11, 583024.	2.8	5
143	Harmonic Distortion of Blood Pressure Waveform as a Measure of Arterial Stiffness. Frontiers in Bioengineering and Biotechnology, 2022, 10, 842754.	4.1	5
144	Tracking respiratory mechanics around natural breathing rates via variable ventilation. Scientific Reports, 2020, 10, 6722.	3.3	4

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145	Breath Hold Facilitates Targeted Deposition of Aerosolized Droplets in a 3D Printed Bifurcating Airway Tree. Annals of Biomedical Engineering, 2021, 49, 812-821.	2.5	4
146	Monitoring of respiratory resistance in the diagnosis of mild intermittent asthma. Clinical and Experimental Allergy, 2019, 49, 921-923.	2.9	3
147	Cellular and Extracellular Homeostasis in Fluctuating Mechanical Environments. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2020, , 83-121.	1.0	3
148	Mechano-inflammatory sensitivity of ACE2: Implications for the regional distribution of SARS-CoV-2 injury in the lung. Respiratory Physiology and Neurobiology, 2022, 296, 103804.	1.6	3
149	The effect of mechanical or electrical stimulation on apnea length in mice. Biomedical Engineering Letters, 2018, 8, 329-335.	4.1	2
150	Transition From Phasic to Tonic Contractility in Airway Smooth Muscle After Birth: An Experimental and Computational Modeling Study. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2019, 2, .	0.5	2
151	Modeling Lung Derecruitment in VILI Due to Fluid-Occlusion: The Role of Emergent Behavior. Frontiers in Physiology, 2020, 11, 542744.	2.8	2
152	Random-walk model of cotransport. Physical Review E, 2020, 102, 022403.	2.1	2
153	Stabilizing breathing pattern using local mechanical vibrations: comparison of deterministic and stochastic stimulations in rodent models of apnea of prematurity. Biomedical Engineering Letters, 2021, 11, 383-392.	4.1	1
154	Introduction to structure-function relationships. , 2022, , 1-7.		1
155	The collagen molecule. , 2022, , 29-54.		1
156	A Personalized Spring Network Representation of Emphysematous Lungs From CT Images. Frontiers in Network Physiology, 2022, 2, .	1.8	1
157	Structural Defects Lead to Dynamic Entrapment in Cardiac Electrophysiology. PLoS ONE, 2015, 10, e0119535.	2.5	0
158	Network Approaches to the Mechanical Failure of Soft Tissues: Implications for Disease and Tissue Engineering. , 2016, , 417-437.		0
159	Roles of Mechanical Forces and Extracellular Matrix Properties in Cellular Signaling in the Lung. , 2012, , 158-178.		0
160	Phosphorylation of Myosin Light Chain (MLC) is Mitochondrial ATP Dependent and Rhoâ€kinase Independent During Fluctuationâ€Driven Mechanotransduction. FASEB Journal, 2015, 29, 1029.6.	0.5	0
161	Mechanisms of the Shock Absorber Function in Proximal Aorta. FASEB Journal, 2015, 29, 804.2.	0.5	0
162	Modeling maintenance and repair: The matrix loaded. , 2022, , 229-255.		0

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163	Collagen supramolecular structures: Evolution, organization, and biogenesis. , 2022, , 55-76.		0
164	Collagen suprastructures: The data and the models. , 2022, , 77-111.		0
165	Small leucine-rich proteoglycans: The tiny controllers of the extracellular matrix. , 2022, , 143-163.		0
166	Extracellular matrix background material: Building blocks, general structure, mechanics, relation to cells, and evolutionary aspects. , 2022, , 9-27.		0
167	Elastic fibers: The near ideal linear springs of the extracellular matrix. , 2022, , 193-227.		0
168	Hyaluronan and hyalectans: The good, the bad, and the ugly. , 2022, , 165-192.		0
169	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. , 2022, , 269-293.		0
170	Separable Least Squares Identification of Long Memory Block Structured Models: Application to Lung Tissue Viscoelasticity. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0