BÃ©la Suki

List of Publications by Year
in descending order

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170	7,766	53939	68831
papers	citations	47 h-index	81 g-index

174	174	174	6406
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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.	0.7	3
2	Modeling maintenance and repair: The matrix loaded. , 2022, , 229-255.		0
3	Collagen supramolecular structures: Evolution, organization, and biogenesis. , 2022, , 55-76.		0
4	Collagen suprastructures: The data and the models. , 2022, , 77-111.		0
5	Introduction to structure-function relationships. , 2022, , 1-7.		1
6	Small leucine-rich proteoglycans: The tiny controllers of the extracellular matrix. , 2022, , 143-163.		0
7	Extracellular matrix background material: Building blocks, general structure, mechanics, relation to cells, and evolutionary aspects. , 2022, , 9-27.		0
8	Elastic fibers: The near ideal linear springs of the extracellular matrix. , 2022, , 193-227.		0
9	Hyaluronan and hyalectans: The good, the bad, and the ugly. , 2022, , 165-192.		0
10	The collagen molecule. , 2022, , 29-54.		1
11	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. , 2022, , 269-293.		0
12	Harmonic Distortion of Blood Pressure Waveform as a Measure of Arterial Stiffness. Frontiers in Bioengineering and Biotechnology, 2022, 10, 842754.	2.0	5
13	A Personalized Spring Network Representation of Emphysematous Lungs From CT Images. Frontiers in Network Physiology, 2022, 2, .	0.8	1
14	Breath Hold Facilitates Targeted Deposition of Aerosolized Droplets in a 3D Printed Bifurcating Airway Tree. Annals of Biomedical Engineering, 2021, 49, 812-821.	1.3	4
15	Percolation of collagen stress in a random network model of the alveolar wall. Scientific Reports, 2021, 11, 16654.	1.6	8
16	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.	2.1	1
17	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.	1.5	9
18	Cellular and Extracellular Homeostasis in Fluctuating Mechanical Environments. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2020, , 83-121.	0.7	3

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19	A Synthetic Bioinspired Carbohydrate Polymer with Mucoadhesive Properties. Angewandte Chemie - International Edition, 2020, 59, 704-710.	7.2	19
20	A Synthetic Bioinspired Carbohydrate Polymer with Mucoadhesive Properties. Angewandte Chemie, 2020, 132, 714-720.	1.6	11
21	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.	1.3	11
22	Modeling lung perfusion abnormalities to explain early COVID-19 hypoxemia. Nature Communications, 2020, 11, 4883.	5.8	95
23	Modeling Lung Derecruitment in VILI Due to Fluid-Occlusion: The Role of Emergent Behavior. Frontiers in Physiology, 2020, 11, 542744.	1.3	2
24	Random-walk model of cotransport. Physical Review E, 2020, 102, 022403.	0.8	2
25	A Markov chain model of particle deposition in the lung. Scientific Reports, 2020, 10, 13573.	1.6	12
26	Fractal Analysis of Lung Structure in Chronic Obstructive Pulmonary Disease. Frontiers in Physiology, 2020, 11, 603197.	1.3	19
27	Avalanches and power law behavior in aortic dissection propagation. Science Advances, 2020, 6, eaaz1173.	4.7	24
28	A High-Throughput System for Cyclic Stretching of Precision-Cut Lung Slices During Acute Cigarette Smoke Extract Exposure. Frontiers in Physiology, 2020, 11, 566.	1.3	17
29	An Analytical Model for Estimating Alveolar Wall Elastic Moduli From Lung Tissue Uniaxial Stress-Strain Curves. Frontiers in Physiology, 2020, 11, 121.	1.3	22
30	Tuning mitochondrial structure and function to criticality by fluctuation-driven mechanotransduction. Scientific Reports, 2020, 10, 407.	1.6	23
31	Tracking respiratory mechanics around natural breathing rates via variable ventilation. Scientific Reports, 2020, 10, 6722.	1.6	4
32	An Analytic Model of Tissue Self-Healing and Its Network Implementation: Application to Fibrosis and Aging. Frontiers in Physiology, 2020, 11, 583024.	1.3	5
33	Nonlinear elasticity of the lung extracellular microenvironment is regulated by macroscale tissue strain. Acta Biomaterialia, 2019, 92, 265-276.	4.1	49
34	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, .	0.3	2
35	Heart rate fluctuation after birth predicts subsequent cardiorespiratory stability in preterm infants. Pediatric Research, 2019, 86, 348-354.	1.1	8
36	Monitoring of respiratory resistance in the diagnosis of mild intermittent asthma. Clinical and Experimental Allergy, 2019, 49, 921-923.	1.4	3

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37	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.	1.3	5
38	CT Imaging-Based Low-Attenuation Super Clusters in Three Dimensions and the Progression of Emphysema. Chest, 2019, 155, 79-87.	0.4	14
39	Effect of continuous positive airway pressure on breathing variability in early preterm lung disease. Pediatric Pulmonology, 2018, 53, 755-761.	1.0	7
40	Blood pressure-induced physiological strain variability modulates wall structure and function in aorta rings. Physiological Measurement, 2018, 39, 105014.	1.2	9
41	The effect of mechanical or electrical stimulation on apnea length in mice. Biomedical Engineering Letters, 2018, 8, 329-335.	2.1	2
42	Topographic distribution of idiopathic pulmonary fibrosis: a hybrid physics- and agent-based model. Physiological Measurement, 2018, 39, 064007.	1.2	22
43	Design and nonlinear modeling of a sensitive sensor for the measurement of flow in mice. Physiological Measurement, 2018, 39, 075002.	1.2	5
44	Alveolar leak develops by a rich-get-richer process in ventilator-induced lung injury. PLoS ONE, 2018, 13, e0193934.	1.1	26
45	A time-varying biased random walk approach to human growth. Scientific Reports, 2017, 7, 7805.	1.6	7
46	Elastase-Induced Lung Emphysema Models in Mice. Methods in Molecular Biology, 2017, 1639, 67-75.	0.4	32
47	A microfluidic chamber-based approach to map the shear moduli of vascular cells and other soft materials. Scientific Reports, 2017, 7, 2305.	1.6	6
48	Optimization of Variable Ventilation for Physiology, Immune Response and Surfactant Enhancement in Preterm Lambs. Frontiers in Physiology, 2017, 8, 425.	1.3	15
49	Linking Ventilator Injury-Induced Leak across the Blood-Gas Barrier to Derangements in Murine Lung Function. Frontiers in Physiology, 2017, 8, 466.	1.3	31
50	Regulation of Mitochondrial Structure and Dynamics by the Cytoskeleton and Mechanical Factors. International Journal of Molecular Sciences, 2017, 18, 1812.	1.8	132
51	Assessing Structureâ€“Function Relations in Mice Using the Forced Oscillation Technique and Quantitative Histology. Methods in Molecular Biology, 2017, 1639, 77-91.	0.4	5
52	Predicting Structure-Function Relations and Survival following Surgical and Bronchoscopic Lung Volume Reduction Treatment of Emphysema. PLoS Computational Biology, 2017, 13, e1005282.	1.5	9
53	Entropy Production and the Pressureâ€“Volume Curve of the Lung. Frontiers in Physiology, 2016, 7, 73.	1.3	15
54	Mechanical Forces Accelerate Collagen Digestion by Bacterial Collagenase in Lung Tissue Strips. Frontiers in Physiology, 2016, 7, 287.	1.3	29

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55	Characterization of a Mouse Model of Emphysema Induced by Multiple Instillations of Low-Dose Elastase. Frontiers in Physiology, 2016, 7, 457.	1.3	36
56	Regulatory Roles of Fluctuation-Driven Mechanotransduction in Cell Function. Physiology, 2016, 31, 346-358.	1.6	21
57	Homeostatic maintenance via degradation and repair of elastic fibers under tension. Scientific Reports, 2016, 6, 27474.	1.6	10
58	Systems Biology and Clinical Practice in Respiratory Medicine. The Twain Shall Meet. American Journal of Respiratory and Critical Care Medicine, 2016, 194, 1053-1061.	2.5	44
59	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.	1.8	10
60	Network Approaches to the Mechanical Failure of Soft Tissues: Implications for Disease and Tissue Engineering. , 2016, , 417-437.		0
61	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.	1.2	6
62	Structural Defects Lead to Dynamic Entrapment in Cardiac Electrophysiology. PLoS ONE, 2015, 10, e0119535.	1.1	0
63	A Role of Myocardin Related Transcription Factor-A (MRTF-A) in Scleroderma Related Fibrosis. PLoS ONE, 2015, 10, e0126015.	1.1	77
64	Design of a Novel Equi-Biaxial Stretcher for Live Cellular and Subcellular Imaging. PLoS ONE, 2015, 10, e0140283.	1.1	21
65	Scale dependence of structure-function relationship in the emphysematous mouse lung. Frontiers in Physiology, 2015, 6, 146.	1.3	20
66	Fluctuation-driven mechanotransduction regulates mitochondrial-network structureÂandÂfunction. Nature Materials, 2015, 14, 1049-1057.	13.3	60
67	Biomechanics of the Aging Lung Parenchyma. Engineering Materials and Processes, 2015, , 95-133.	0.2	11
68	Computational modeling helps uncover mechanisms related to the progression of emphysema. Drug Discovery Today: Disease Models, 2015, 15, 9-15.	1.2	5
69	Correlated Variability in the Breathing Pattern and End-Expiratory Lung Volumes in Conscious Humans. PLoS ONE, 2015, 10, e0116317.	1.1	17
70	Phosphorylation of Myosin Light Chain (MLC) is Mitochondrial ATP Dependent and Rhoâ€kinase Independent During Fluctuationâ€Driven Mechanotransduction. FASEB Journal, 2015, 29, 1029.6.	0.2	0
71	Mechanisms of the Shock Absorber Function in Proximal Aorta. FASEB Journal, 2015, 29, 804.2.	0.2	0
72	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.	1.5	47

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73	Proteoglycans Maintain Lung Stability in an Elastase-Treated Mouse Model of Emphysema. American Journal of Respiratory Cell and Molecular Biology, 2014, 51, 26-33.	1.4	45
74	A network model of correlated growth of tissue stiffening in pulmonary fibrosis. New Journal of Physics, 2014, 16, 065022.	1.2	19
75	A computational model of the response of adherent cells to stretch and changes in substrate stiffness. Journal of Applied Physiology, 2014, 116, 825-834.	1.2	38
76	Epithelial and endothelial damage induced by mechanical ventilation modes. Current Opinion in Critical Care, 2014, 20, 17-24.	1.6	36
77	Assessing the Functional Mechanical Properties of Bioengineered Organs With Emphasis on the Lung. Journal of Cellular Physiology, 2014, 229, 1134-1140.	2.0	33
78	Tidal Stretches Differently Regulate the Contractile and Cytoskeletal Elements in Intact Airways. PLoS ONE, 2014, 9, e94828.	1.1	6
79	Emphysema and Mechanical Stress-Induced Lung Remodeling. Physiology, 2013, 28, 404-413.	1.6	60
80	A Mechanical Design Principle for Tissue Structure and Function in the Airway Tree. PLoS Computational Biology, 2013, 9, e1003083.	1.5	11
81	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
82	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.	1.1	50
83	Variable ventilation enhances ventilation without exacerbating injury in preterm lambs with respiratory distress syndrome. Pediatric Research, 2012, 72, 384-392.	1.1	12
84	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.	2.5	28
85	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.	1.1	33
86	The Major Transitions of Life from a Network Perspective. Frontiers in Physiology, 2012, 3, 94.	1.3	10
87	Jamming dynamics of stretch-induced surfactant release by alveolar type II cells. Journal of Applied Physiology, 2012, 112, 824-831.	1.2	16
88	Roles of Mechanical Forces and Extracellular Matrix Properties in Cellular Signaling in the Lung. , 2012, , 158-178.		0
89	Emergent Structure-Function Relations in Emphysema and Asthma. Critical Reviews in Biomedical Engineering, 2011, 39, 263-280.	0.5	35
90	Microtubule Dynamics Regulate Cyclic Stretch-Induced Cell Alignment in Human Airway Smooth Muscle Cells. PLoS ONE, 2011, 6, e26384.	1.1	62

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91	Lung Parenchymal Mechanics. , 2011, 1, 1317-1351.		139
92	Lung tissue mechanics as an emergent phenomenon. Journal of Applied Physiology, 2011, 110, 1111-1118.	1.2	115
93	Temporal complexity in clinical manifestations of lung disease. Journal of Applied Physiology, 2011, 110, 1723-1731.	1.2	55
94	Structureâ€“Function Relations in an Elastase-Induced Mouse Model of Emphysema. American Journal of Respiratory Cell and Molecular Biology, 2011, 45, 517-524.	1.4	57
95	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.	3.3	10
96	Complexity and Emergent Phenomena. , 2011, 1, 995-1029.		25
97	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.	1.5	39
98	Tidal stretches do not modulate responsiveness of intact airways in vitro. Journal of Applied Physiology, 2010, 109, 295-304.	1.2	75
99	In search of complexity. Journal of Applied Physiology, 2010, 109, 1571-1572.	1.2	8
100	Modeling the dynamics of airway constriction: effects of agonist transport and binding. Journal of Applied Physiology, 2010, 109, 553-563.	1.2	29
101	Variability of lung function predicts loss of asthma control following withdrawal of inhaled corticosteroid treatment. Thorax, 2010, 65, 403-408.	2.7	37
102	Mechanical Forces Regulate Elastase Activity and Binding Site Availability in Lung Elastin. Biophysical Journal, 2010, 99, 3076-3083.	0.2	49
103	Reply to Noble, Hernandez, Mitchell, and Janssen. Journal of Applied Physiology, 2010, 109, 940-941.	1.2	5
104	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.	1.3	98
105	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.	3.3	33
106	Estimating the diameter of airways susceptible for collapse using crackle sound. Journal of Applied Physiology, 2009, 107, 1504-1512.	1.2	5
107	Three-dimensional measurement of alveolar airspace volumes in normal and emphysematous lungs using micro-CT. Journal of Applied Physiology, 2009, 107, 583-592.	1.2	62
108	Assessment of peripheral lung mechanics. Respiratory Physiology and Neurobiology, 2008, 163, 54-63.	0.7	40

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109	Extracellular matrix mechanics in lung parenchymal diseases. Respiratory Physiology and Neurobiology, 2008, 163, 33-43.	0.7	125
110	Mechanical and Failure Properties of Extracellular Matrix Sheets as a Function of Structural Protein Composition. Biophysical Journal, 2008, 94, 1916-1929.	0.2	64
111	Complexity of chronic asthma and chronic obstructive pulmonary disease: implications for risk assessment, and disease progression and control. Lancet, The, 2008, 372, 1088-1099.	6.3	133
112	Design of a new variable-ventilation method optimized for lung recruitment in mice. Journal of Applied Physiology, 2008, 104, 1329-1340.	1.2	43
113	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.	3.3	64
114	Linking Parenchymal Disease Progression to Changes in Lung Mechanical Function by Percolation. American Journal of Respiratory and Critical Care Medicine, 2007, 176, 617-623.	2.5	119
115	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.	1.2	24
116	Relationship between dynamic respiratory mechanics and disease heterogeneity in sheep lavage injury*. Critical Care Medicine, 2007, 35, 870-878.	0.4	93
117	Rheological Behavior of Living Cells Is Timescale-Dependent. Biophysical Journal, 2007, 93, L39-L41.	0.2	100
118	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
119	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.	1.2	18
120	Effects of heterogeneities on the partitioning of airway and tissue properties in normal mice. Journal of Applied Physiology, 2007, 102, 859-869.	1.2	38
121	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.	1.3	25
122	Quantitative characterization of airspace enlargement in emphysema. Journal of Applied Physiology, 2006, 100, 186-193.	1.2	111
123	Comparison of variable and conventional ventilation in a sheep saline lavage lung injury model*. Critical Care Medicine, 2006, 34, 439-445.	0.4	107
124	Early Emphysema in the Tight Skin and Pallid Mice. American Journal of Respiratory Cell and Molecular Biology, 2006, 34, 688-694.	1.4	51
125	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.	1.3	42
126	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

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127	Effects of elastase on the mechanical and failure properties of engineered elastin-rich matrices. Journal of Applied Physiology, 2005, 98, 1434-1441.	1.2	33
128	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.	1.2	122
129	Mechanical interactions between collagen and proteoglycans: implications for the stability of lung tissue. Journal of Applied Physiology, 2005, 98, 672-679.	1.2	221
130	Risk of severe asthma episodes predicted from fluctuation analysis of airway function. Nature, 2005, 438, 667-670.	13.7	196
131	On the Role of Surface Tension in the Pathophysiology of Emphysema. American Journal of Respiratory and Critical Care Medicine, 2005, 171, 300-304.	2.5	32
132	Relating Airway Diameter Distributions to Regular Branching Asymmetry in the Lung. Physical Review Letters, 2005, 95, 168101.	2.9	50
133	Biomechanics of the lung parenchyma: critical roles of collagen and mechanical forces. Journal of Applied Physiology, 2005, 98, 1892-1899.	1.2	263
134	Decreasing size of cardiogenic oscillations reflects decreasing compliance of the respiratory system during long-term ventilation. Journal of Applied Physiology, 2004, 96, 879-884.	1.2	555
135	Tissue heterogeneity in the mouse lung: effects of elastase treatment. Journal of Applied Physiology, 2004, 97, 204-212.	1.2	106
136	Rheology of airway smooth muscle cells is associated with cytoskeletal contractile stress. Journal of Applied Physiology, 2004, 96, 1600-1605.	1.2	128
137	Impact of microvascular circulation on peripheral lung stability. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2004, 287, L879-L889.	1.3	26
138	Perimeter growth of a branched structure: Application to crackle sounds in the lung. Physical Review E, 2003, 68, 011909.	0.8	9
139	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. Fluctuation and Noise Letters, 2003, 03, R1-R25.	1.0	31
140	On the Progressive Nature of Emphysema. American Journal of Respiratory and Critical Care Medicine, 2003, 168, 516-521.	2.5	158
141	Lung and alveolar wall elastic and hysteretic behavior in rats: effects of in vivo elastase treatment. Journal of Applied Physiology, 2003, 95, 1926-1936.	1.2	71
142	Variable ventilation induces endogenous surfactant release in normal guinea pigs. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2003, 285, L370-L375.	1.3	108
143	Temporal dynamics of recurrent airway symptoms and cellular random walk. Journal of Applied Physiology, 2003, 95, 2122-2127.	1.2	15
144	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.	2.5	108

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145	Correlation properties of tidal volume and end-tidal O₂ and CO₂ concentrations in healthy infants. Journal of Applied Physiology, 2002, 92, 1817-1827.	1.2	49
146	Fluctuations and Power Laws in Pulmonary Physiology. American Journal of Respiratory and Critical Care Medicine, 2002, 166, 133-137.	2.5	115
147	Dynamic instabilities in the inflating lung. Nature, 2002, 417, 809-811.	13.7	84
148	Hysteresivity of the lung and tissue strip in the normal rat: effects of heterogeneities. Journal of Applied Physiology, 2001, 91, 737-747.	1.2	50
149	Analysis of the harmonic content of the tidal flow waveforms in infants. Journal of Applied Physiology, 2001, 91, 1687-1693.	1.2	16
150	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.	2.5	150
151	Airway Constriction Pattern Is a Central Component of Asthma Severity. American Journal of Respiratory and Critical Care Medicine, 2001, 164, 207-215.	2.5	160
152	Avalanche Dynamics of Crackle Sound in the Lung. Physical Review Letters, 2001, 87, 088101.	2.9	40
153	Effects of collagenase and elastase on the mechanical properties of lung tissue strips. Journal of Applied Physiology, 2000, 89, 3-14.	1.2	134
154	Size distribution of recruited alveolar volumes in airway reopening. Journal of Applied Physiology, 2000, 89, 2030-2040.	1.2	29
155	A three-dimensional model of the human airway tree. Journal of Applied Physiology, 1999, 87, 2207-2217.	1.2	237
156	Scaling behavior in crackle sound during lung inflation. Physical Review E, 1999, 60, 4659-4663.	0.8	26
157	Parametric and Nonparametric Nonlinear System Identification of Lung Tissue Strip Mechanics. Annals of Biomedical Engineering, 1999, 27, 548-562.	1.3	24
158	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.	1.3	16
159	Sensitivity Analysis for Evaluating Nonlinear Models of Lung Mechanics. Annals of Biomedical Engineering, 1998, 26, 230-241.	1.3	21
160	Sensitivity Analysis of Kernel Estimates: Implications in Nonlinear Physiological System Identification. Annals of Biomedical Engineering, 1998, 26, 488-501.	1.3	14
161	Factors Affecting Volterra Kernel Estimation: Emphasis on Lung Tissue Viscoelasticity. Annals of Biomedical Engineering, 1998, 26, 103-116.	1.3	14
162	Mathematical Modeling of the First Inflation of Degassed Lungs. Annals of Biomedical Engineering, 1998, 26, 608-617.	1.3	30

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163	Volume distributions of avalanches in lung inflation: A statistical mechanical approach. Physical Review E, 1997, 56, 3385-3394.	0.8	14
164	Partitioning of lung tissue response and inhomogeneous airway constriction at the airway opening. Journal of Applied Physiology, 1997, 82, 1349-1359.	1.2	69
165	Branching design of the bronchial tree based on a diameter-flow relationship. Journal of Applied Physiology, 1997, 82, 968-976.	1.2	68
166	Dynamic properties of lung parenchyma: mechanical contributions of fiber network and interstitial cells. Journal of Applied Physiology, 1997, 83, 1420-1431.	1.2	107
167	Avalanches in the Lung: A Statistical Mechanical Model. Physical Review Letters, 1996, 76, 2192-2195.	2.9	52
168	Harmonic distortion from nonlinear systems with broadband inputs: Applications to lung mechanics. Annals of Biomedical Engineering, 1995, 23, 672-681.	1.3	32
169	Avalanches and power-law behaviour in lung inflation. Nature, 1994, 368, 615-618.	13.7	267
170	Viscoleastic properties of the visceral pleura and its contribution to lung impedance. Respiration Physiology, 1992, 90, 271-287.	2.8	10