Jason H T Bates

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5297292/publications.pdf

Version: 2024-02-01

181 papers	9,672 citations	44069 48 h-index	46799 89 g-index
212 all docs	212 docs citations	212 times ranked	6378 citing authors

#	Article	IF	Citations
1	Time dependence of recruitment and derecruitment in the lung: a theoretical model. Journal of Applied Physiology, 2002, 93, 705-713.	2.5	1,217
2	The role of fractional calculus in modeling biological phenomena: A review. Communications in Nonlinear Science and Numerical Simulation, 2017, 51, 141-159.	3.3	448
3	Measuring the lung function in the mouse: the challenge of size. Respiratory Research, 2003, 4, 4.	3.6	320
4	Technical standards for respiratory oscillometry. European Respiratory Journal, 2020, 55, 1900753.	6.7	311
5	A reevaluation of the validity of unrestrained plethysmography in mice. Journal of Applied Physiology, 2002, 93, 1198-1207.	2.5	235
6	Tumor Necrosis Factorâ€“Î± Overexpression in Lung Disease. American Journal of Respiratory and Critical Care Medicine, 2005, 171, 1363-1370.	5.6	231
7	The Use and Misuse of Penh in Animal Models of Lung Disease. American Journal of Respiratory Cell and Molecular Biology, 2004, 31, 373-374.	2.9	228
8	The allergic mouse model of asthma: normal smooth muscle in an abnormal lung?. Journal of Applied Physiology, 2004, 96, 2019-2027.	2.5	201
9	Airway and tissue mechanics in a murine model of asthma: alveolar capsule vs. forced oscillations. Journal of Applied Physiology, 2002, 93, 263-270.	2.5	197
10	Measuring lung function in mice: the phenotyping uncertainty principle. Journal of Applied Physiology, 2003, 94, 1297-1306.	2.5	190
11	Oscillation Mechanics of the Respiratory System. , 2011, 1, 1233-1272.		157
12	Animal models of asthma. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2009, 297, L401-L410.	2.9	148
13	Extravascular fibrin, plasminogen activator, plasminogen activator inhibitors, and airway hyperresponsiveness. Journal of Clinical Investigation, 2004, 114, 104-111.	8.2	148
14	The role of time and pressure on alveolar recruitment. Journal of Applied Physiology, 2009, 106, 757-765.	2.5	135
15	Airway Hyperresponsiveness in Allergically Inflamed Mice. American Journal of Respiratory and Critical Care Medicine, 2007, 175, 768-774.	5.6	132
16	The Nonallergic Asthma of Obesity. A Matter of Distal Lung Compliance. American Journal of Respiratory and Critical Care Medicine, 2014, 189, 1494-1502.	5.6	127
17	Extracellular matrix mechanics in lung parenchymal diseases. Respiratory Physiology and Neurobiology, 2008, 163, 33-43.	1.6	125
18	Effect of stochastic heterogeneity on lung impedance during acute bronchoconstriction: a model analysis. Journal of Applied Physiology, 1997, 82, 1616-1625.	2.5	122

#	Article	IF	Citations
19	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
20	A distributed nonlinear model of lung tissue elasticity. Journal of Applied Physiology, 1997, 82, 32-41.	2.5	115
21	Lung tissue mechanics as an emergent phenomenon. Journal of Applied Physiology, 2011, 110, 1111-1118.	2.5	115
22	Î±1-Antitrypsin Determines the Pattern of Emphysema and Function in Tobacco Smokeâ€“exposed Mice. American Journal of Respiratory and Critical Care Medicine, 2002, 166, 1596-1603.	5.6	109
23	Modeling lung perfusion abnormalities to explain early COVID-19 hypoxemia. Nature Communications, 2020, 11, 4883.	12.8	95
24	Beyond BMI. Chest, 2018, 153, 702-709.	0.8	91
25	Extravascular fibrin, plasminogen activator, plasminogen activator inhibitors, and airway hyperresponsiveness. Journal of Clinical Investigation, 2004, 114, 104-111.	8.2	91
26	Intrinsic and antigen-induced airway hyperresponsiveness are the result of diverse physiological mechanisms. Journal of Applied Physiology, 2007, 102, 221-230.	2.5	84
27	Update on the Features and Measurements of Experimental Acute Lung Injury in Animals: An Official American Thoracic Society Workshop Report. American Journal of Respiratory Cell and Molecular Biology, 2022, 66, e1-e14.	2.9	82
28	Ventilator-induced lung injury and lung mechanics. Annals of Translational Medicine, 2018, 6, 378-378.	1.7	81
29	Analysis of Regional Mechanics in Canine Lung Injury Using Forced Oscillations and 3D Image Registration. Annals of Biomedical Engineering, 2011, 39, 1112-1124.	2.5	72
30	Mechanical Breath Profile of Airway Pressure Release Ventilation. JAMA Surgery, 2014, 149, 1138.	4.3	72
31	Temporal dynamics of acute isovolume bronchoconstriction in the rat. Journal of Applied Physiology, 1997, 82, 55-62.	2.5	71
32	Dynamic mechanical consequences of deep inflation in mice depend on type and degree of lung injury. Journal of Applied Physiology, 2004, 96, 293-300.	2.5	71
33	Modeling the dynamics of recruitment and derecruitment in mice with acute lung injury. Journal of Applied Physiology, 2008, 105, 1813-1821.	2.5	70
34	A multiscale, spatially distributed model of asthmatic airway hyper-responsiveness. Journal of Theoretical Biology, 2010, 266, 614-624.	1.7	70
35	A Recruitment Model of Quasi-Linear Power-Law Stress Adaptation in Lung Tissue. Annals of Biomedical Engineering, 2007, 35, 1165-1174.	2.5	69
36	Parenchymal tethering, airway wall stiffness, and the dynamics of bronchoconstriction. Journal of Applied Physiology, 2007, 102, 1912-1920.	2.5	68

#	Article	IF	Citations
37	Nonlinearity of respiratory mechanics during bronchoconstriction in mice with airway inflammation. Journal of Applied Physiology, 2002, 92, 1802-1807.	2.5	64
38	Quantifying the Roles of Tidal Volume and PEEP in the Pathogenesis of Ventilator-Induced Lung Injury. Annals of Biomedical Engineering, 2011, 39, 1505-1516.	2.5	64
39	Pulmonary impedance and alveolar instability during injurious ventilation in rats. Journal of Applied Physiology, 2005, 99, 723-730.	2.5	63
40	The Estimation of Lung Mechanics Parameters in the Presence of Pathology: A Theoretical Analysis. Annals of Biomedical Engineering, 2006, 34, 384-392.	2.5	60
41	Choosing the frequency of deep inflation in mice: balancing recruitment against ventilator-induced lung injury. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2006, 291, L710-L717.	2.9	60
42	Transient mechanical benefits of a deep inflation in the injured mouse lung. Journal of Applied Physiology, 2002, 93, 1709-1715.	2.5	58
43	Oscillation mechanics of the human lung periphery in asthma. Journal of Applied Physiology, 2004, 97, 1849-1858.	2.5	58
44	Multi-scale lung modeling. Journal of Applied Physiology, 2011, 110, 1466-1472.	2.5	54
45	Influence of distinct asthma phenotypes on lung function following weight loss in the obese. Respirology, 2014, 19, 1170-1177.	2.3	54
46	The Synergistic Interactions of Allergic Lung Inflammation and Intratracheal Cationic Protein. American Journal of Respiratory and Critical Care Medicine, 2008, 177, 261-268.	5.6	52
47	Influence of airway wall stiffness and parenchymal tethering on the dynamics of bronchoconstriction. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2010, 299, L98-L108.	2.9	52
48	The interface between measurement and modeling of peripheral lung mechanics. Respiratory Physiology and Neurobiology, 2005, 148, 153-164.	1.6	51
49	The POOR Get POORer: A Hypothesis for the Pathogenesis of Ventilator-induced Lung Injury. American Journal of Respiratory and Critical Care Medicine, 2020, 202, 1081-1087.	5.6	51
50	Human Trachealis and Main Bronchi Smooth Muscle Are Normoresponsive in Asthma. American Journal of Respiratory and Critical Care Medicine, 2015, 191, 884-893.	5.6	50
51	Effect of Airway Pressure Release Ventilation on Dynamic Alveolar Heterogeneity. JAMA Surgery, 2016, 151, 64.	4.3	49
52	The "Goldilocks effect" in cystic fibrosis: identification of a lung phenotype in the cftr knockout and heterozygous mouse. BMC Genetics, 2004, 5, 21.	2.7	48
53	Linking the Development of Ventilator-Induced Injury to Mechanical Function in the Lung. Annals of Biomedical Engineering, 2013, 41, 527-536.	2.5	48
54	Force heterogeneity in a two-dimensional network model of lung tissue elasticity. Journal of Applied Physiology, 1998, 85, 1223-1229.	2.5	46

#	Article	IF	Citations
55	Exaggerated airway narrowing in mice treated with intratracheal cationic protein. Journal of Applied Physiology, 2006, 100, 500-506.	2.5	45
56	An Official American Thoracic Society Workshop Report: Obesity and Metabolism. An Emerging Frontier in Lung Health and Disease. Annals of the American Thoracic Society, 2017, 14, 1050-1059.	3.2	45
57	The response to recruitment worsens with progression of lung injury and fibrin accumulation in a mouse model of acid aspiration. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2007, 292, L1580-L1589.	2.9	42
58	Physiological Mechanisms of Airway Hyperresponsiveness in Obese Asthma. American Journal of Respiratory Cell and Molecular Biology, 2016, 54, 618-623.	2.9	42
59	Alveolar Micromechanics in Bleomycin-induced Lung Injury. American Journal of Respiratory Cell and Molecular Biology, 2018, 59, 757-769.	2.9	42
60	Airway-parenchymal interdependence after airway contraction in rat lung explants. Journal of Applied Physiology, 1998, 85, 231-237.	2.5	41
61	Electrical impedance tomography can monitor dynamic hyperinflation in dogs. Journal of Applied Physiology, 1998, 84, 726-732.	2.5	40
62	Assessment of peripheral lung mechanics. Respiratory Physiology and Neurobiology, 2008, 163, 54-63.	1.6	40
63	Predicting the response of the injured lung to the mechanical breath profile. Journal of Applied Physiology, 2015, 118, 932-940.	2.5	40
64	A Multi-Scale Approach to Airway Hyperresponsiveness: From Molecule to Organ. Frontiers in Physiology, 2012, 3, 191.	2.8	39
65	Nonparametric Block-Structured Modeling of Lung Tissue Strip Mechanics. Annals of Biomedical Engineering, 1998, 26, 242-252.	2.5	38
66	Physiologic Dysfunction of the Asthmatic Lung: What's Going On Down There, Anyway?. Proceedings of the American Thoracic Society, 2009, 6, 306-311.	3.5	37
67	Computational assessment of airway wall stiffness in vivo in allergically inflamed mouse models of asthma. Journal of Applied Physiology, 2008, 104, 1601-1610.	2.5	35
68	Inhaled salmeterol and/or fluticasone alters structure/function in a murine model of allergic airways disease. Respiratory Research, 2010, 11, 22.	3.6	35
69	Airway hyperresponsiveness induced by cationic proteins in vivo: site of action. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L413-L418.	2.9	34
70	Pathophysiology to Phenotype in the Asthma of Obesity. Annals of the American Thoracic Society, 2017, 14, S395-S398.	3.2	34
71	Sex-Related Differences in Pulmonary Function following 6 Months of Cigarette Exposure: Implications for Sexual Dimorphism in Mild COPD. PLoS ONE, 2016, 11, e0164835.	2.5	34
72	Modeling the Complex Dynamics of Derecruitment in the Lung. Annals of Biomedical Engineering, 2010, 38, 3466-3477.	2.5	33

#	Article	IF	Citations
73	Dynamic Mechanical Interactions Between Neighboring Airspaces Determine Cyclic Opening and Closure in Injured Lung. Critical Care Medicine, 2017, 45, 687-694.	0.9	33
74	Acid aspiration-induced airways hyperresponsiveness in mice. Journal of Applied Physiology, 2009, 107, 1763-1770.	2.5	32
75	Predicting ventilator-induced lung injury using a lung injury cost function. Journal of Applied Physiology, 2016, 121, 106-114.	2.5	32
76	Geometric determinants of airway resistance in two isomorphic rodent species. Respiratory Physiology and Neurobiology, 2002, 130, 317-325.	1.6	31
77	Weight Loss Decreases Inherent and Allergic Methacholine Hyperresponsiveness in Mouse Models of Diet-Induced Obese Asthma. American Journal of Respiratory Cell and Molecular Biology, 2016, 55, 176-187.	2.9	31
78	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
79	Bronchodilatory effect of deep inspiration on the dynamics of bronchoconstriction in mice. Journal of Applied Physiology, 2007, 103, 1696-1705.	2.5	30
80	Potential role of the airway wall in the asthma of obesity. Journal of Applied Physiology, 2015, 118, 36-41.	2.5	30
81	Modeling the oscillation dynamics of activated airway smooth muscle strips. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L849-L855.	2.9	29
82	Heterogeneity of bronchoconstriction does not distinguish mild asthmatic subjects from healthy controls when supine. Journal of Applied Physiology, 2008, 104, 10-19.	2.5	28
83	Could an increase in airway smooth muscle shortening velocity cause airway hyperresponsiveness?. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2011, 300, L121-L131.	2.9	28
84	Emergence of Complex Behavior. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 586-591.	4.8	27
85	The Temporal Evolution of Airways Hyperresponsiveness and Inflammation. Journal of Allergy & Therapy, 2012, 01, 1-7.	0.1	27
86	Mechanical output impedance of the lung determined from cardiogenic oscillations. Journal of Applied Physiology, 2001, 91, 859-865.	2.5	26
87	Time Course of Airway Mechanics of the (+)Insert Myosin Isoform Knockout Mouse. American Journal of Respiratory Cell and Molecular Biology, 2004, 30, 326-332.	2.9	26
88	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
89	BMI but not central obesity predisposes to airway closure during bronchoconstriction. Respirology, 2019, 24, 543-550.	2.3	26
90	Alveolar leak develops by a rich-get-richer process in ventilator-induced lung injury. PLoS ONE, 2018, 13, e0193934.	2.5	26

#	Article	IF	Citations
91	Complexity and Emergent Phenomena. , 2011, 1, 995-1029.		25
92	Systems physiology of the airways in health and obstructive pulmonary disease. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2016, 8, 423-437.	6.6	25
93	Effects of recruitment/derecruitment dynamics on the efficacy of variable ventilation. Journal of Applied Physiology, 2011, 110, 1319-1326.	2.5	24
94	Fluctuation Analysis of Peak Expiratory Flow and Its Association with Treatment Failure in Asthma. American Journal of Respiratory and Critical Care Medicine, 2017, 195, 993-999.	5.6	24
95	A model of the spontaneously breathing patient: applications to intrinsic PEEP and work of breathing. Journal of Applied Physiology, 1997, 82, 1694-1703.	2.5	23
96	An Adaptive Filter to Reduce Cardiogenic Oscillations on Esophageal Pressure Signals. Annals of Biomedical Engineering, 1998, 26, 260-267.	2.5	23
97	Detrimental effects of albuterol on airway responsiveness requires airway inflammation and is independent of Î²-receptor affinity in murine models of asthma. Respiratory Research, 2011, 12, 27.	3.6	23
98	Linking lung function to structural damage of alveolar epithelium in ventilator-induced lung injury. Respiratory Physiology and Neurobiology, 2018, 255, 22-29.	1.6	23
99	Mechanical properties of mouse distal lung: in vivo versus in vitro comparison. Respiratory Physiology and Neurobiology, 2004, 143, 77-86.	1.6	22
100	A Continuous-Binding Cross-Linker Model for Passive Airway Smooth Muscle. Biophysical Journal, 2010, 99, 3164-3171.	0.5	22
101	Topographic distribution of idiopathic pulmonary fibrosis: a hybrid physics- and agent-based model. Physiological Measurement, 2018, 39, 064007.	2.1	22
102	Classification and Detection of Breathing Patterns with Wearable Sensors and Deep Learning. Sensors, 2020, 20, 6481.	3.8	22
103	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
104	Neither fibrin nor plasminogen activator inhibitor-1 deficiency protects lung function in a mouse model of acute lung injury. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2009, 296, L277-L285.	2.9	21
105	Atelectrauma Versus Volutrauma: A Tale of Two Time-Constants. , 2020, 2, e0299.		21
106	Three Alveolar Phenotypes Govern Lung Function in Murine Ventilator-Induced Lung Injury. Frontiers in Physiology, 2020, 11, 660.	2.8	20
107	Altered airway mechanics in the context of obesity and asthma. Journal of Applied Physiology, 2021, 130, 36-47.	2.5	20
108	Continuum vs. spring network models of airway-parenchymal interdependence. Journal of Applied Physiology, 2012, 113, 124-129.	2.5	20

#	Article	IF	Citations
109	Breathing responses to small inspiratory threshold loads in humans. Journal of Applied Physiology, 1999, 86, 874-880.	2.5	19
110	Unrestrained video-assisted plethysmography: a noninvasive method for assessment of lung mechanical function in small animals. Journal of Applied Physiology, 2008, 104, 253-261.	2.5	19
111	Airway-parenchymal interdependence in the lung slice. Respiratory Physiology and Neurobiology, 2013, 185, 211-216.	1.6	19
112	Mechanical interactions between adjacent airways in the lung. Journal of Applied Physiology, 2014, 116, 628-634.	2.5	19
113	A network model of correlated growth of tissue stiffening in pulmonary fibrosis. New Journal of Physics, 2014, 16, 065022.	2.9	19
114	A computational model of unresolved allergic inflammation in chronic asthma. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 308, L384-L390.	2.9	19
115	Point:Counterpoint: Lung impedance measurements are/are not more useful than simpler measurements of lung function in animal models of pulmonary disease. Journal of Applied Physiology, 2007, 103, 1900-1901.	2.5	18
116	Airway responsiveness depends on the diffusion rate of methacholine across the airway wall. Journal of Applied Physiology, 2012, 112, 1670-1677.	2.5	18
117	Assessing the Progression of Ventilator-Induced Lung Injury in Mice. IEEE Transactions on Biomedical Engineering, 2013, 60, 3449-3457.	4.2	18
118	CORP: Measurement of lung function in small animals. Journal of Applied Physiology, 2017, 123, 1039-1046.	2.5	18
119	A Micromechanical Model of Lung Tissue Rheology. Annals of Biomedical Engineering, 1998, 26, 679-687.	2.5	17
120	Kinetics of respiratory system elastance after airway challenge in dogs. Journal of Applied Physiology, 2000, 89, 2023-2029.	2.5	17
121	Mechanical Determinants of Airways Hyperresponsiveness. Critical Reviews in Biomedical Engineering, 2011, 39, 281-296.	0.9	17
122	Influence of parenchymal heterogeneity on airway-parenchymal interdependence. Respiratory Physiology and Neurobiology, 2013, 188, 94-101.	1.6	17
123	Cisplatin Pharmacodynamics Following Endobronchial Ultrasound-Guided Transbronchial Needle Injection into Lung Tumors. Scientific Reports, 2019, 9, 6819.	3.3	17
124	Effects of deep inspiration on bronchoconstriction in the rat. Respiration Physiology, 2001, 127, 201-215.	2.7	15
125	Pulmonary mechanics: A system identification perspective. , 2009, 2009, 170-2.		15
126	The Inflammatory Twitch as a General Strategy for Controlling the Host Response. Journal of Immunology, 2013, 190, 3510-3516.	0.8	15

#	Article	IF	Citations
127	Entropy Production and the Pressureâ€“Volume Curve of the Lung. Frontiers in Physiology, 2016, 7, 73.	2.8	15
128	Using injury cost functions from a predictive single-compartment model to assess the severity of mechanical ventilator-induced lung injuries. Journal of Applied Physiology, 2019, 127, 58-70.	2.5	14
129	Central airway collapse is related to obesity independent of asthma phenotype. Respirology, 2021, 26, 334-341.	2.3	14
130	Current Patterns and Electrode Types for Single-Source Electrical Impedance Tomography of the Thorax. Annals of Biomedical Engineering, 1998, 26, 253-259.	2.5	13
131	A Micromechanical Model of Airway-Parenchymal Interdependence. Annals of Biomedical Engineering, 2000, 28, 309-317.	2.5	13
132	A model-based approach to interpreting multibreath nitrogen washout data. Journal of Applied Physiology, 2018, 124, 1155-1163.	2.5	13
133	Effect of time-varying load on degree of bronchoconstriction in the dog. Journal of Applied Physiology, 1998, 85, 1464-1470.	2.5	12
134	Thoracic Gas Volume Measurements in Paralyzed Mice. Annals of Biomedical Engineering, 2004, 32, 1420-1427.	2.5	12
135	Modeling the impairment of airway smooth muscle force by stretch. Journal of Applied Physiology, 2015, 118, 684-691.	2.5	12
136	Wavelet decomposition facilitates training on small datasets for medical image classification by deep learning. Histochemistry and Cell Biology, 2021, 155, 309-317.	1.7	12
137	Balancing Robustness against the Dangers of Multiple Attractors in a Hopfield-Type Model of Biological Attractors. PLoS ONE, 2010, 5, e14413.	2.5	12
138	Effects of Central Airway Shunting on the Mechanical Impedance of the Mouse Lung. Annals of Biomedical Engineering, 2011, 39, 497-507.	2.5	10
139	Resistance to alveolar shape change limits range of force propagation in lung parenchyma. Respiratory Physiology and Neurobiology, 2015, 211, 22-28.	1.6	10
140	Modeling the Progression of Epithelial Leak Caused by Overdistension. Cellular and Molecular Bioengineering, 2016, 9, 151-161.	2.1	10
141	A Progressive Rupture Model of Soft Tissue Stress Relaxation. Annals of Biomedical Engineering, 2013, 41, 1129-1138.	2.5	9
142	Variable Ventilation as a Diagnostic Tool for the Injured Lung. IEEE Transactions on Biomedical Engineering, 2015, 62, 2106-2113.	4.2	9
143	Mechanical Properties of the Lung. , 2015, , 289-304.		8
144	Sources of breathing pattern variability in the respiratory feedback control loop. Journal of Theoretical Biology, 2019, 469, 148-162.	1.7	8

#	Article	IF	Citations
145	Percolation of collagen stress in a random network model of the alveolar wall. Scientific Reports, 2021, 11, 16654.	3.3	8
146	Elucidating the fuzziness in physician decision making in ARDS. Journal of Clinical Monitoring and Computing, 2013, 27, 357-363.	1.6	7
147	Computational models of ventilator induced lung injury and surfactant dysfunction. Drug Discovery Today: Disease Models, 2015, 15, 17-22.	1.2	7
148	Physiological signature of late-onset nonallergic asthma of obesity. ERJ Open Research, 2020, 6, 00049-2020.	2.6	7
149	The multiscale manifestations of airway smooth muscle contraction in the lung. Journal of Applied Physiology, 2010, 109, 269-270.	2.5	6
150	A Computational Model of Cellular Engraftment on Lung Scaffolds. BioResearch Open Access, 2016, 5, 308-319.	2.6	6
151	Tumor density is associated with response to endobronchial ultrasound-guided transbronchial needle injection of cisplatin. Journal of Thoracic Disease, 2020, 12, 4825-4832.	1.4	6
152	Prediction of lung cancer risk based on age and smoking history. Computer Methods and Programs in Biomedicine, 2022, 216, 106660.	4.7	6
153	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
154	Forced expiratory time: a composite of airway narrowing and airway closure. Journal of Applied Physiology, 2021, 130, 80-86.	2.5	5
155	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
156	A computational modeling approach for dosing endoscopic intratumoral chemotherapy for advanced non-small cell lung cancer. Scientific Reports, 2022, 12, 44.	3.3	5
157	Electric Cell-Substrate Impedance Sensing (ECIS) as a Platform for Evaluating Barrier-Function Susceptibility and Damage from Pulmonary Atelectrauma. Biosensors, 2022, 12, 390.	4.7	5
158	Prospectively Quantifying the Propensity for Atrial Fibrillation: A Mechanistic Formulation. PLoS ONE, 2015, 10, e0118746.	2.5	4
159	The Role of Airway Shunt Elastance on the Compartmentalization of Respiratory System Impedance. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2019, 2, 0110011-110018.	0.5	4
160	What is new in respiratory monitoring?. Journal of Clinical Monitoring and Computing, 2022, 36, 599-607.	1.6	4
161	Dissecting the inflammatory twitch in allergically inflamed mice. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 310, L1003-L1009.	2.9	3
162	Predicting the Mortality Benefit of CT Screening for Second Lung Cancer in a High-Risk Population. PLoS ONE, 2016, 11, e0165471.	2.5	3

#	Article	IF	Citations
163	Mitigation of airways responsiveness by deep inflation of the lung. Journal of Applied Physiology, 2018, 124, 1447-1455.	2.5	3
164	Positive expiratory pressure: a potential therapy to mitigate acute bronchoconstriction in the asthma of obesity. Journal of Applied Physiology, 2021, 131, 1663-1670.	2.5	3
165	On the ill-conditioned nature of the intracardiac inverse problem. , 2009, 2009, 3929-31.		2
166	Breathing In and Out: Airway Resistance. Respiratory Medicine, 2018, , 127-150.	0.1	2
167	Modeling Lung Derecruitment in VILI Due to Fluid-Occlusion: The Role of Emergent Behavior. Frontiers in Physiology, 2020, 11, 542744.	2.8	2
168	How should airway smooth muscle be punished for causing asthma?. Journal of Applied Physiology, 2008, 104, 575-576.	2.5	1
169	Of course respiratory mechanics are related to airway inflammation in asthma! The more difficult question is â€œWhy?â€• Clinical and Experimental Allergy, 2013, 43, 488-490.	2.9	1
170	Sighs matter. Respirology, 2018, 23, 727-728.	2.3	1
171	Analyzing Complex Medical Image Information: Convolution Versus Wavelets in a Neural Net. , 2019, , 85-94.		1
172	Measuring the mechanical input impedance of the respiratory system with breath-driven flow oscillations. Journal of Applied Physiology, 2021, 130, 1064-1071.	2.5	1
173	Digital resolution enhancement of intracardiac excitation maps during atrial fibrillation. Journal of Clinical Monitoring and Computing, 2015, 29, 279-89.	1.6	0
174	Structural Defects Lead to Dynamic Entrapment in Cardiac Electrophysiology. PLoS ONE, 2015, 10, e0119535.	2.5	0
175	Evaluation of scientific impact: insights and incites. Journal of Applied Physiology, 2015, 118, 253-254.	2.5	0
176	The Virtual Microbiome: Computational Approaches to the Study of Microbe-Host Interactions. Critical Reviews in Biomedical Engineering, 2016, 44, 459-472.	0.9	0
177	It's in our interests not to be in conflictâ€"of interest, that is. Journal of Applied Physiology, 2016, 121, 829-830.	2.5	0
178	Failure to Disclose Conflicts of Interest. JAMA Surgery, 2016, 151, 1190.	4.3	0
179	An oropharyngeal device for airway management of conscious and semiconscious patients: A randomized clinical trial. Journal of the American College of Emergency Physicians Open, 2021, 2, e12440.	0.7	0
180	A simple assessment of lung nodule location for reduction in unnecessary invasive procedures. Journal of Thoracic Disease, 2021, 13, 4207-4216.	1.4	0

#	Article	IF	Citations
181	Deep Fusion of Ultrasound Videos for Furosemide Classification. , 2022, , .		0